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ABSTRACT

Factors influencing classroom teachers' decisions to refer students for psychoeducational evaluation were investigated through data collected about actual students at the time they were referred. A report on the referral process describes responses of 105 teachers to a national survey. Specific questions of interest pertain to reasons for referral, causes of students' difficulties, changes students would have to make to fit within the regular classroom structure, and interventions attempted before the referrals were made. Relationships of these factors to student sex and the interrelationships among factors are presented. Among implications for changing the referral process are clearly delineating reasons for referral and including the teacher's role as one of the factors in the student's difficulties. (Author/CL)

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University of Minnesota

Research Report No. 91

AN ANALYSIS OF CURRENT PRACTICE IN REFERRING STUDENTS FOR PSYCHOEDUCATIONAL EVALUATION: IMPLICATIONS FOR CHANGE

James E. Ysseldyke, Sandra Christenson, Bob Pianta,
Martha L. Thurlow, and Bob Algozzine

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- Outcome Evaluation

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October, 1982

Abstract

The numerous factors influencing classroom teachers' decisions to refer students for psychoeductional evaluations were investigated through data collected about actual students at the time they were referred by their teachers. This comprehensive report on the referral process describes the responses of 105 teachers to a national survey. Specific questions of interest pertain to reasons for the referrals, causes of students' difficulties, desired outcomes of the referrals and assessments, changes students would have to make to fit within the regular classroom structure, and interventions attempted before the referrals were made. The relations of these factors to student sex and the interrelationships among factors are presented. Implications for child study teams to change the referral process as well as future research considerations are discussed.

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Chapter 1

Introduction

Research efforts at the Institute for Research on Learning Disabilities at the University of Minnesota focus on the complex set of theoretical, conceptual, practical, and empirical issues in the identification and assessment of the heterogenous group of students labeled learning disabled. This research report describes the results of a nine-state survey of regular classroom teachers regarding their referral of a particular student for psychoeducational assessment and special education consideration. Major research objectives addressed by this study included the following:

- to provide demographic characteristics of referred students relative to non-referred students
- to describe classroom teachers' specific reasons for referral
- to describe teachers' attributions for students difficulties
- to describe classroom interventions attempted prior to referral
- to describe teachers' desired outcomes for their referrals
- to describe teachers' desired changes for the referred students' behavior
- to identify the extent to which teachers' perceptions of students at the point of referral differ for boys and girls
- to identify the extent to which the primary referral reason results in different teacher perceptions of referral
- to identify relationships among the factors affecting the teacher's decision
- to identify the extent to which a teacher's reinforcement history regarding referral influences subsequent referrals

Rationale

The documentation of current referral, evaluation, and placement practices has suggested that the most important decision made is the decision by a classroom teacher to refer a student for psychoeducational evaluation (Ysseldyke & Algozzine, 1982). Poland, Ysseldyke, Thurlow, and Mirkin (1979) found that when special education directors indicated the source of referrals, 80% mentioned regular classroom teachers. Data from a nationwide survey of special education directors showed that 92% of referred students were subsequently evaluated and 73% of those evaluated were placed in some type of special education program (Algozzine, Christenson, & Ysseldyke, in press). The referral initiates a process described as a "search for pathology" (Sarason & Doris, 1979) which is engaged in by "a massive system of identification" (Ysseldyke & Algozzine, 1982). This "system" places heavy emphasis on testing and assessment, often using devices that are, at best, marginally technically adequate (Salvia & Ysseldyke, 1981; Thurlow & Ysseldyke, 1979).

The accuracy of decision makers in the referral to placement process has been addressed. It has been demonstrated that when decision makers rely upon psychometric data, identification of learning disabled children is no better than chance (Ysseldyke, Algozzine, Regan, Potter, Richey, & Thurlow, 1980). In a computer simulation study, Ysseldyke et al. (1980) found that 51% of decision makers declared a normal child eligible for services. Shepard and Smith (1981) reported that 49% of the students placed in PCD (perceptual and communication disorders) classes in Colorado were misplaced. Finally, essentially no relationship between placement team decisions and the assessment data presented at the placement meetings was found by Ysseldyke, Algozzine, Richey, and Graden (1981). The questionable nature of the activities that follow the referral of a child necessitate the further investigation of the referral process itself.

It appears that the reason the teacher states for referring the student is very influential in determining the outcome of referral. The inability of decision-making teams to use the data (however adequate or inadequate) garnered through assessment procedures to make reliable decisions about children results in teams acting to verify the referral reason by labeling and placing the student. This conclusion is validated by the high percentage of referrals that are placed.

Most previous studies of referral have examined reason for referral simply by a kind of "retrospective counting" or through artificial case studies, often viewing referral as a unitary event. These approaches have not considered the complexity of the referral decision. Decisions to refer students are influenced by the behaviors, characteristics, or traits exhibited by the student, teacher perceptions and expectations for the student's behavior, and the extent to which the teacher is successful in intervening within the regular classroom. In sum, conclusions from previous studies point to the need for further study of the referral decision itself.

Given the importance of the referral decision in the entire referral-to-placement decision-making process, the classroom teacher's role in initiating referrals, and the complex set of causal relationships that may influence the teacher's decision to refer, it was decided to use a survey format to study actual student referrals that had been initiated by regular classroom teachers.

Research Questions

The following major research questions were addressed in this survey of classroom teachers:

A. Student Characteristics

- What is the typical age, grade, and sex of referred students?
- What is the reading group placement of referred students?
- How do teachers rate referred students relative to non-referred peers on several student learning characteristics?

B. Reasons for Referral

- What are the types and frequencies of specific kinds of behavior for which teachers refer students for psychoeducational evaluation?
- What priority rank do teachers assign for their multiple referral reasons?
- To what extent are teachers' reasons for referral related to student characteristics?
- To what extent can the severity of reasons for referral be characterized?
- To what extent can teachers' referral reasons be classified as subjective or objective?

C. Attributions for Student Problems

- What is the nature of the causes to which teachers' attribute students' problems?
- To what extent can teachers' attributions for students' failure be characterized as internal or external?

- To what extent are teachers' attributions related to student characteristics?

D. Pre-Referral Interventions

- What is the nature of the interventions teachers use prior to referral?
- To what extent do pre-referral interventions implemented by teachers conform to qualities of accountable interventions?
- With whom have classroom teachers spoken regarding the referral?
- To what extent are teachers' pre-referral interventions related to student characteristics?

E. Desired Outcomes

- What do teachers desire as an outcome of the referral process?
- To what extent are teachers desired outcomes related to student characteristics?
- What do teachers want from assessment?

F. Desired Changes

- What student changes do teachers view as necessary for the referred student to fit within the mainstream classroom?
- To what extent do desired changes reflect student, teacher, or system changes?
- To what extent are desired changes related to student characteristics?

G. Sex Differences

- Are referred boys and girls rated differently on students' characteristics relative to their classmates?
- To what extent do teachers' referral reasons, attributions, pre-referral interventions, desired outcomes, and desired changes differ for boys and girls?

H. Comparison of Primary Referral Reason

- Do teachers' attributions, pre-referral interventions, desired outcomes, and desired changes differ for students' referred primarily for academic or behavioral reasons?

I. Relationships Among Referral Variables

- To what extent are teachers' reasons, attributions, pre-referral interventions, desired outcomes, and expectations for student behavior related?
- To what extent does the relationship among referral variables clarify our conceptualization of a "referral problem"?

Major Findings

Chapters 3 to 10 describe in detail the major analyses that were conducted. The major findings from these were as follows:

A. Student Characteristics

- Greater than twice as many boys as girls were referred.
- Most referred students were in primary grades (i.e., K-3).
- The most common reading group placement was the lowest classroom group or individualized instruction.
- Over half of the referred students were rated poor or very poor relative to classmates on speed of learning, motivation, maturity, and judgment.
- Teachers' ratings of referred students' ability to learn and to behave relative to classmates were highly variable.

B. Reasons for Referral

- Students were referred for multiple reasons; the most common reasons were academic and behavioral in nature.
- In approximately half of the cases, the primary reason for referral was different from the reason listed first.

- Reasons could be characterized as general, subjective, and lacking a consistent pattern.

C. Attributions for Student Problems

- Teachers were able to designate at least one cause for the problems of 89.5% of the referred students.

- Only 2.7% of teachers' attributions for referred students related to the instructional setting.

- Approximately 62% of the causes were attributed to inherent student characteristics; over half of these indicated "low ability."

- Slightly less than half (47.6%) of the referred students were seen as having an environmentally-related cause for their school failure; 43.8% of these reflected home factors.

D. Pre-Referral Interventions

- Most pre-referral interventions were dependent upon the classroom teacher for implementation.

- The majority of interventions were related to how to teach; methods and use of behavioral strategies constituted over half of the interventions attempted with referred students.

- Although an average of three pre-referral interventions were implemented per student, the interventions lacked accountability and systematic application of learning principles.

- Most conversations with specialists regarding the referred student prior to referral were not the result of a staffing; most were informal contacts.

E. Desired Outcomes

- Teachers desired placement or placement-related activities more frequently than educational suggestions.

- Teachers' desired outcomes for referral and assessment were very similar.

- Teacher-rated characteristics of referred students differed as a function of the teachers' desired outcomes.

F. Desired Changes

- Teachers want increased student receptivity for learning if referred students remain in the mainstream classes; changes in academic areas are desired less often.

G. Sex Differences

- Teachers rated referred girls, relative to classmates, lower on ability to learn and speed of learning.

- Teachers rated referred boys, relative to classmates, lower in behavior.

- Teachers referred proportionately more boys for behavior disorders, implemented behavioral management strategies more with boys, and desired placement and educational suggestions more for boys.

- Teachers reported use of structural pre-referral interventions more with girls.

H. Comparison of Primary Referral Reason

- Teachers attributed students' learning difficulties to intra-student causes (e.g., low ability) but students' behavioral difficulties to home causes (e.g., family problems).

- Teachers reported greater use of teaching methods with students referred for academic difficulties and greater use of behavioral strategies for students referred for behavioral reasons.

- Regardless of type of referral reason, teachers wanted the referred student to improve in task management skills.

- Teachers' desired outcomes did not differ as a function of the primary reason for referral; teachers preferred special education involvement more for both groups.

I. Relationships Among Referral Variables

- The majority of significant relationships among referral factors involved the reason for referral; of all the factors studied, referral reason was identified as the most important variable.

Chapter 2

Methodology

A referral survey was developed to obtain information on several factors related to regular classroom teachers' decisions to refer students for assessment and special education consideration. Surveys were completed by volunteer teachers at the point of referral. This chapter contains a description of the subjects who participated in the referral survey study, a description of the referral survey, additional procedural information, a description of the coding systems, a summary of data analysis procedures, and demographic information on the referred students.

Subjects

Subjects were 105 elementary regular classroom teachers from 14 public school districts within 10 states: California, Florida, Georgia, Illinois, Minnesota, Montana, Nebraska, Pennsylvania, Virginia, and Washington. Each region of the United States was represented in this sample. The breakdown of states within regions was: northeastern - 1 state; southeastern - 4 states; north central - 2 states; western - 3 states.

Ninety-one percent of the sample was female; the average number of years of teaching experience was 11.4 (range = 1 - 35 years). Twelve percent of the teachers identified their school districts as rural, 26% as urban, and 48% as suburban; 14% did not specify their district characteristics.

The average class size per teacher, based on three school years (i.e., 1977-1980), was 25 students. There was no change in the class size over this three-year period. For the same time period, the teachers indicated that an average of 2.5 students per class had sufficient learning and behavior problems that it was necessary to refer them for evaluation; an average of 2.3 students per class was evaluated; an average of 1.7 students per class was provided special education services. There was a very slight increase in yearly averages over the three school years. The mean number of students referred by school year was 2.2 students for 1977-78, 2.4 students for 1978-79, and 3.0 students for 1979-80. Similarly, there was an increase for evaluations: 2.0 students for 1977-78, 2.2 students for 1978-79, and 2.7 students for 1979-80. However, there were smaller increases in student placements; 1.5 students were placed in 1977-78, 1.8 in 1978-79, and 1.9 in 1979-80. The majority of teachers referred two or three students, however, the range was from 0 to 10 students. The range for evaluation and placement was 0 to 9 students.

Data Collection Instrument

A two-page survey form was developed to elicit information about referred students from regular class teachers. In addition to demographic data, comparative ratings of the referred student on several student variables, and the teacher's annual referral rates, each teacher provided information regarding six factors: (a) reasons for referral, (b) causes for the student's school difficulties, (c) pre-referral interventions attempted within the classroom, (d) desired outcomes from the referral, (e) desired outcomes from the assessment, and (f) desired changes in the referred student's behavior. A free-response format was used in order to obtain a less constrained description of teachers' perceptions than would be achieved by a checklist format. A copy of the referral survey is included in Appendix A.

Using an initial draft of the survey, a pilot study was conducted within several school districts in one midwestern state. The survey was modified after a critical reading of the responses from approximately 100 teachers. Revisions involved clarity of wording as well as additional questions. The second draft of the survey also was pilot tested; the questions were rated as to their relevance and clarity by 25 regular class teachers enrolled in a course of graduate studies in education. These teachers judged the survey questions to be relevant and clearly written; no changes were suggested.

Procedure

School district administrators served as contact liaisons between the researchers and schools. Through these liaisons, 14 elementary principals each were sent 25 referral surveys (N = 350). A letter describing the study was attached to each survey; a copy of the letter appears in Appendix B. The principals asked the teachers to read the letter and complete the survey at the time they initiated a referral. Interested teachers (N=115) completed the survey and returned it directly to the investigators in a provided stamped, pre-addressed envelope. Ten of the returned surveys were eliminated from analyses because they did not satisfy the requirements of the study (e.g., a survey completed for a student already placed in special education or a student of junior high grade placement).

Collecting information from class teachers at the initiation of an actual referral presented a naturally-existing constraint on data collection. While no effort was made to seek a representative national sample of regular class teachers, an effort was made to obtain a substantive sample. The data were difficult to collect because of two major contingencies not directly under the control of the investigators. First, the referral surveys were placed in schools for which the rate of referral was unknown. Second, the teacher was given the option to participate; the number of teacher refusals is unknown. Thus data collection was contingent upon school district approval, the occurrence of referrals, teacher agreement to participate, and completion of the survey. The surveys were placed in the schools between October 1, 1980 and April 15, 1981. Given these constraints, the return rate appeared to be acceptable.

Coding Systems

A previously researched system was used to code reasons for referral and attributions for students' difficulties. Coding categories were developed for questions regarding pre-referral interventions, teachers' desired outcomes from referral and assessment, and desired student changes. The responses to all questions were read carefully, categories and criteria for inclusion developed, and reliability checks conducted.

Due to the free-response format of the questions, multiple responses frequently occurred. For each question, each of the separately listed responses was coded into one of the established categories for that question. Inter-rater agreement of .80 was obtained on an initial sample of 10 surveys; after refinement of categorical descriptions, agreement across all questions was .93 for a subsequent sample of 20 surveys. Descriptions of the coding systems for each question are provided in the relevant chapters. Examples of responses representing each category appear in Appendix C.

Data Analysis

Analyses of the data varied according to the question being addressed. Descriptive procedures (e.g., frequency counts, percentages, means) were used primarily; for some questions, *t* tests and chi square analyses were utilized. The level of significance for all statistical tests was set at 0.05.

The multiple responses to many of the questions required that a special procedure be used to meet the assumption of independent observations when chi square analyses were conducted. In these cases, each of the established categories was coded as present or absent, 2X2 contingency tables were formed, and the chi square statistic was applied to assess relationships among the categorical, qualitative data. This necessary procedure resulted in loss of data.

The relationship between teachers' referral history for placement (high and low placement groups) and their responses to each of the six questions was of interest. Because of the small variability across teachers in percentage of placement, it was difficult to divide the teachers into high and low placement groups. To test the feasability of conducting analyses with teachers' referral history as one factor, several chi square analyses were attempted using various groupings of the teachers and their desired outcomes for referral. All results were nonsignificant. Therefore, subsequent analyses between referral history for placement and reasons, attributions, pre-referral interventions, and expectations for student change were not conducted.

Student Characteristics

The findings of the survey must be interpreted with regard to demographic characteristics of the referred students. A summary of these characteristics appears in Table 1.

Insert Table 1 about here

Demographic information on the referred students indicated that the teachers in this study referred 2.5 times more males (70%) than females (29%). Seventy percent of the referred students were in the primary grades (K-3); the mean age of the referred students was 8.2 years (range = 5 - 13).

The teachers reported an average of three reading groups in their classrooms (range = 1 - 5). For the students whose reading group was identified (N = 94), 59.6% were in the lowest group, 24.5% were in the middle group, and 4.3% were in the highest group. The remaining students (11.2%) did not fit into the classroom grouping arrangements; the teachers indicated that special materials were provided because of severely delayed skills for 9.6% of these students. The other two students required advanced reading instruction.

Each referring teacher rated the referred student on a Likert scale of 1 to 5 across several dimensions: functioning within the group, functioning as typical of the group, ability to learn, speed of learning, motivation, behavior, maturity, and judgment. These ratings were made relative to the referred students' reading group peers. For those students rated (N = 104), over 66% of the teachers disagreed or strongly disagreed with a statement that the referred student functioned well within the group (66.4%) or was typical of students in the group (73.1%). When rating the referred student on ability to learn and behave relative to others in his/her reading group, the teachers' ratings were fairly evenly distributed across the five scale points (e.g., very good to very poor). Therefore, the students demonstrated considerable variability as perceived by their teachers on these two dimensions. In contrast, consistently over half of the students were rated as poor or very poor relative to peers on speed of learning (64.7%), motivation (61.5%), maturity (58.2%), and judgment (64.0%); fewer than 18% of the referred students were rated as good or very good on any of these four characteristics.

Chapter 3

Reasons for Teachers' Referrals of Students

Several investigators have suggested the importance of knowing why teachers refer students. Problem identification from the referring teacher's perspective has been discussed as important in increasing communication about and instructional planning for the referred student (Bergan, 1977). Various methods have been suggested for improving communication, including use of a well-written referral form (Alper & White, 1971; Hiltbrunner & Vasa, 1974-5; Ysseldyke, 1968), improved teacher-school psychologist contact (Kratochwill & Bergan, 1978; Walsh, Felicisima, & Scrafica, 1976), and assessment planning and report writing generated from the specific referral questions (Bagnato, 1980; Batsche, 1981).

The frequency of and reasons for referrals have long been investigated in the psychoeducational literature. Reasons stated for referral have been examined relative to the referral source, grade level, student sex, racial bias, and school system size (Gilbert, 1957; Gregory, 1977; Lietz & Gregory, 1978; Nicholson, 1967; Rice, 1963; Robbins, Mercer, & Meyers, 1967). Most studies report sex differences in that a larger proportion of males are referred than are females (see Chapter 8). However, the literature contains several contradictory findings. Although Gilbert (1957) and Nicholson (1967) cited "academic difficulties" as the most frequent reason for referral, Robbins et al. (1967) reported that "behavior problems" constituted the most prevalent concern among referrals. The most frequent reason for referral remained consistent across grades in some investigations (Gilbert, 1957; Gregory, 1977), while others found that reasons for referral varied as a function of grade placement in school (Nicholson, 1967; Rice, 1963; Robbins et al., 1967). Finally, higher referral rates for minority populations have been documented in the literature; no demographic data regarding race was collected on the referred student in this study.

This chapter presents the results from two questions on the referral survey that provide information on teachers' reasons for referring students.

Method

Procedure

Each referring teacher was asked to specify the major problems for which the student was being referred, and to rank order the problems as to their importance (e.g., 1 = most important reason). Data analysis involved descriptive statistics (e.g., categorical frequencies and percentages) and *t* tests.

Coding System

The teachers' stated reasons for referral were categorized according to a modification of the system developed by UCLA's Marker Variable Project (Keogh, Major-Kingsley, Omori-Gordon, & Reid, 1980); the categories in that system included emotionally-manifested, learning-related, attention-related, coordination and perceptual symptoms, behavior and activity disorders, language, physical development, performance variables, and miscellaneous. The modification of the system used in the present study involved the omission of symptoms depicting motivational or organizational problems from the category of "emotionally-manifested symptoms"; these were recorded separately in a category entitled "performance variables."

Results

Types of Reasons

The number of times each reason for referral was cited is presented in Table 2. The teachers listed 426 reasons for the 105 students they referred, resulting in an average of 4 referral reasons per student. Of these, 420 reasons reflected student characteristics and were coded into one of the predetermined categories. Six reasons (coded miscellaneous) were either school-related characteristics (e.g., "wrong grade placement") or home factors (e.g., "parents wanted him tested"). Approximately 62% of the reasons for referral were characteristic of learning-related (39.9%) or emotionally-manifested (21.8%) symptoms.

Insert Table 2 about here

Within the learning-related category, approximately 65% of the listed symptoms indicated specific learning deficits (includes academic areas) and below grade level performance (see Table 3). Memory difficulties and inability to follow directions were ranked next; however, each represented only 6.5% of the symptoms. Each of the remaining symptoms, which often were related to task readiness skills, occurred less than 5% of the time.

Insert Table 3 about here

An analysis of the symptoms comprising the emotionally-manifested category revealed that the top four ranked symptoms reflected more passive, nonaggressive indications of emotional behavior (see Table 3). These symptoms (poor social, school adjustment; self-concept; immaturity; and withdrawn behavior) comprised over half (56.9%) of the symptoms. The symptoms reflecting more aggressive, hostile, or extreme forms of inappropriate adjustment each occurred with a frequency of less than 6.5%. Since the extreme signs of emotional disturbance were so infrequent in this sample, the emotionally-manifested and behavior disorders categories were combined in other analyses (see Chapter 9). Twenty-eight percent of all of the teachers' listed reasons reflected behavioral concerns.

Because most students were referred for more than one reason, an analysis was conducted on the percentage of students referred for various reasons. These percentages appear in Table 4. Consistent with previous research (Gilbert, 1957; Nicholson, 1967), learning-related and emotionally-manifested reasons occurred most frequently; 95 of the 105 students had either a learning-related or emotionally-manifested reason or both indicated under reason for referral. Therefore, only 10 students were not referred for at least one of these two reasons. Of the 105 students, 29.6% were referred for a performance difficulties, 28.6% for attentional difficulties, and 24.8% for behavior disorders; the remaining reasons occurred in less than 20% of the students (range = 1.9% to 19.1%).

Insert Table 4 about here

Some differences in referral reasons were noted for students in different grade levels. Relative to students in Kindergarten to third grade, the frequency of occurrence of learning and attentional reasons for students in grades 4-6 was slightly lower (i.e., 1%) while emotionally-manifested (i.e., 17%) and performance (i.e., 7%) reasons were higher.

The percentages of students referred for problems in specific academic areas also were analyzed. This analysis indicated that 37.1% (N=39) of the students were referred for reading difficulties, 26.7% (N=28) for math, 13.3% (N=14) for spelling, and 12.4% (N=13) for written expression. Therefore, over 62% of the referred students had language arts related difficulties (i.e., reading, spelling, or written expression).

The seriousness of the referred students' difficulties were inferred by identifying the number of reason categories included within each teacher's reasons for referring the student. The rationale for this inference was the assumption that the greater the range of student difficulties, the more serious the presenting factors. Table 5 presents the frequency of students with problems that fall in single or multiple categories of reasons.

Insert Table 5 about here

The 105 students were referred for reasons reflecting from one (always learning-related) to a combination of five categories. Most students had been referred for reasons falling within two or three categories. Tremendous variability was present; 47 different combinations of referral reasons were identified. An extreme example, but one that illustrates the variability present, is illustrated by the reasons given for the referral of one student. In rank order, the reasons were "learning disabilities," "uncontrollable behavior," "gifted," "withdrawn," and "hygiene."

Seriousness of referral reason also was addressed by looking at the number of teacher concerns coded within each category of reasons. For eight of the categories, teachers predominantly mentioned only one concern. In contrast, the range of teacher concerns for students referred for emotionally-manifested reasons was from 1 to 4; the range for learning-related reasons was from 1 to 5. The majority of students referred for either of these reasons had one or two concerns listed; 10.5% of students referred for emotionally-manifested reasons had 3 to 4 teacher concerns listed and 19.1% of students referred for learning-related reasons had 3 to 5 teacher concerns listed. For example, a fifth grade boy was referred (in rank order of importance) for five learning-related reasons: "in reading, can't discriminate between long and short vowels," "has problems comprehending short paragraphs," "weak in spelling skills," "can't recognize different types of literature," and "has problems with computational skills in math."

Most of the students in this sample were referred for multiple reason categories rather than for multiple teacher concerns within one category. When multiple teacher concerns within a reason category were listed, they occurred most often for learning-related and emotionally-manifested reasons.

Priority Ranking

The teachers also were asked to prioritize the reasons for referral in terms of their importance (i.e., rank of 1 = most important reason, 2 = next most important, etc.). Of the 97 teachers who did so, 53.1% (N = 54) ranked the reasons in the same order as they had written them down initially. The other teachers (44.3%) gave a different priority ranking than indicated by the handwritten order of reasons.

The absolute frequencies of the top two rankings are presented in Table 6. Learning-related was the most important reason for the majority of referred students. When this reason was not given a rank of 1, in most cases it was then given a rank of 2.

Insert Table 6 about here

Qualities of Referral Reasons

Specificity of referral reasons was addressed. Most of the listed reasons were general (e.g., "weak in spelling," "can't read," "discipline") or semi-specific ("problems in computational math," "trouble comprehending short paragraphs"). Several other characteristics of the teachers' referral reasons were identified. For example, one-word attributes such as motivation, attention span, immaturity, or spelling were listed without qualifying modifiers such as "poor." In other cases, modifiers were included (e.g., poor self-concept, very insecure). However, when the general category of difficulty was mentioned (e.g., difficulty following directions), specific details pertaining to the reason (e.g., length or complexity of these directions) were not included.

Although some reasons were as general as "learning problems," the academic area usually was specified. However, subskills within the academic area often were missing; when present the subskills were labeled only generally (e.g., "poor reading comprehension"). Only six of the teachers specifically delineated the student's problem behavior (e.g., "r and er articulation problems," "can't learn short 'a' vowel patterns," or "can't count objects past five").

Subjectivity of referral reasons also was examined. Even though the reason for referral might be accurate, it was coded as subjective if the reason was contingent upon the teacher's perception and if it was difficult to measure objectively. Subjectivity (i.e., contingent upon individual teacher's perception or tolerance for behavior) often was present; 61 students (58.1%) were referred for one or more subjective reason such as "not working up to his potential," "poor motivation," "hyperactive," "low self-concept," and "uncontrolled behavior." Interestingly, 19 students (18.1%) were referred because of an "inability." Examples included "inability to learn and retain reading skills," "inability to be attentive," "inability to grasp ideas or phonics," "inability to apply knowledge," and "inability to function normally with peers."

Student Characteristics

Teachers' ratings of the referred student relative to non-referred students on a variety of characteristics (see Chapter 2) were analyzed as a function of the referral reasons for students. Referral reason categories were coded as present or absent. Within categories (e.g., learning-related), dependent t tests were used to compare mean ratings of referred students for whom teachers had listed that particular referral reason to mean ratings of referred students for whom teachers had not listed that referral reason. Ten significant differences were revealed. Students referred for learning-related reasons were rated lower than students not referred for those reasons on ability to learn ($t = 2.89$, $p = .005$) and speed of learning ($t = 2.66$, $p = .009$) and were rated higher on behavior ($t = 2.60$, $p = .011$). Students referred for emotionally-manifested reasons were rated lower on motivation ($t = 2.29$, $p = .024$) and maturity ($t = 2.53$, $p = .014$) than students not referred for those reasons. Students referred for behavior disorders were rated lower than the other students on functioning within the group ($t = 2.00$, $p = .048$), typical of group ($t = 3.40$, $p = .001$), and behavior ($t = 7.25$, $p = .000$). Students referred for attention-related reasons were rated lower on motivation ($t = 2.55$, $p = .012$) and behavior ($t = 3.17$, $p = .002$) than students not referred for attention-related reasons.

Discussion

Consistent with previous research, the reasons listed by the teachers in this study indicated that they were most concerned with students who do not meet academic and behavioral requirements of the classroom. While psychological process deficits (e.g., perceptual-motor, attention-related) were mentioned, they were not of primary concern to the referring teachers in this sample. A major finding from this survey was that teachers refer for reasons internal to the student; the possible contributing effect of the educational environment rarely was noted.

The relationships between teacher ratings of the referred student relative to non-referred peers on several learning variables and the referral reason indicate that teachers differentiated student behaviors when making referrals. Thus, for example, students referred for an academic concern were rated lower on ability and speed of learning, but higher on behavior, while students referred for a behavior reason were rated lower on behavior. While there was a relationship between teachers' referral reasons and ratings of student characteristics, the results also suggest that teachers' referral reasons are indicative of global behavior patterns. Students were referred for several reasons that generally represented different categories of teacher concern.

The lack of specificity in the referral reasons is disturbing given the importance of problem delineation for instructional planning (Bergan, 1977). Instructional planning for students also may be hindered by the fact that the teacher's primary concern was not always the first one listed on the referral form. Thus, many students (and teachers) may be receiving attention, suggestions, and even placements for referral concerns that are not considered to be the most important.

The high degree of subjectivity in the referral reasons may be due, in part, to the survey format. Interviewing would provide a setting for clarification. Over half of the students were referred for reasons that required further clarification. Referrals for "hyperactivity" are contingent upon the referring teacher's perception of and tolerance for "hyperactive" behavior. According to Bergan (1977), such statements are attempts to describe the student but do not specify the nature of his/her problems. Further, these comments emphasize the "defects of the student," offering no information as to how to solve the teacher's concern; they often abrogate educators' problem-solving responsibilities since it is assumed "little can be done to change the condition of the client" (p. 27). Bergan (1977) argues that problem identification involves delineation of both student behavior and the setting in which the behavior occurs.

Finally, the importance of both inservice training for teachers and consultations with them about guidelines for making appropriate referrals is a logical implication of the findings. The use of well-designed written referral forms (Ysseldyke, 1968) is an adequate first step, but subsequent teacher-psychologist contact must occur prior to evaluation. Teachers should be informed of the ecological perspective--that behavior has meaning only within the context in which it is embedded. Therefore, teachers should expect to clarify what they mean by phrases such as "low self-concept." Possible "myths or stereotypes" (e.g., statements for which there is no empirical basis) is yet another topic for inservice training. For example, "not working up to his potential" or "inability to learn and retain reading skills" or "inability to apply knowledge" need to be addressed.

. Educators must keep in mind that it is not only student characteristics that drive the automatic referral-to-evaluation process. While student characteristics play a role in attracting teacher attention, the process itself is driven by educators' and parents' perceptions of and reactions to student behaviors. We hypothesize that the reason given for referral is very influential in obtaining special education services for students.

Chapter 4

Teachers' Attributions for Students' Problems

Teaching involves on-going decision making. Among the decisions made, which include curriculum selection, identification of individual instructional objectives, and evaluation of student progress, one of the most important decisions a classroom teacher makes is to refer a student to the child study team. Many factors in interaction probably influence teachers' decisions to refer students for psychoeducational evaluation. Some of the reasons teachers refer students probably are similar to those that Shavelson and Borko (1979) identified as influencing instructional decisions. They reported that instructional decisions are a function of a complex interaction between student characteristics (or traits), teacher characteristics, and other factors (e.g., material resources, school politics, pressure from either the community or school administration). These same factors are likely to be important when teachers consider the need for a psychoeducational referral.

Recently, attributions (or causes assigned to performance) have been studied. Factors that explain differences in attributions for students' success or failure on specific tasks include locus of control, perceived control, expectancy of success, achievement motivation, self-esteem, academic achievement, and need for achievement (Crandall, Katkovsky, & Preston, 1962; Dweck, 1975; Tollefson, Tracy, Johnsen, Borgers, Buenning, Farmer, & Barke, 1980; Weiner, 1976; Weiner & Kukla, 1970). Both teachers' and parents' attributions for the student's performance (Beckman, 1976; Chapman & Boersma, 1979) as well as students' self-attributions for their success or failure in school settings have been studied (Curtis & Schildhaus, 1980; Deshler, Schumaker, Alley, Warner, & Clark, 1980; Frieze & Snyder, 1980; Nicholls, 1979). Recently, attributions for learning disabled populations have been researched (Pearl, 1980; Pearl & Bryan, 1980; Pearl, Bryan, & Donahue, 1980). Although several classification schemes of attributions have been suggested (Bar-Tal, 1978; Bar-Tal & Darom, 1977; Cooper & Burger, 1978; Frieze, 1976), each is an extension of Weiner's (1976) original conceptual scheme for classifying causal dimensions. Weiner's model contains four elements that can be classified within two dimensions: locus of control (internal versus external) and degree of stability (fixed versus variable). Two of the elements (ability and effort) describe internal qualities of the person performing the task, while the remaining two elements (task difficulty and luck) are considered properties of the task that are external to the person (i.e., environmental factors). In addition, two of the elements (ability and task difficulty) have somewhat enduring (fixed) characteristics, whereas the magnitudes of the two remaining components (effort and luck) are relatively variable.

Although attributions have been researched extensively, little attention has been devoted to the attributions of classroom teachers for students referred to special education services. Referral for psychoeducational evaluation is made in response to success or failure in school-related tasks. Teachers' attributions for student problems that result in referral were of interest in this research; some related research was identified and is summarized here.

A survey of elementary classroom teachers' beliefs about why children do poorly in school (National Education Association, 1979) revealed that 81% of the responding teachers attributed academic and behavioral difficulties to the child's home life, 14% to within-student characteristics, 4% to the school system, and only 1% to inappropriate instruction. In general, respondents to the NEA survey thought elementary teachers were providing a good education and that student difficulties resulted either from home and family problems or from disorders, deficits, and disabilities within individual students. However, teachers were responding at an abstract level; they were not basing their answers on specific students.

Medway (1979) investigated teachers' attributions for students referred for special education services. Teachers were asked to indicate the primary cause for the referral; ability factors were cited as the major cause for 67% of the students referred for learning problems and not cited as a cause for any student referred for behavior problems. In contrast, home problems were seen as the major cause of problems experienced by 67% of the students referred for behavior difficulties as compared with 10% of the students referred for academic problems. The teachers also were asked to indicate the importance of 11 causes using a 1-3 (very important to not important) scale. Mean ratings indicated that factors residing within students generally were seen as most responsible for the referral; home and background factors were moderately responsible, and teaching-related factors were seen as the least responsible. While Medway's findings suggest that teachers actually do attribute students' problems to within-student factors and home factors, the fact that teachers had to select from among provided causes limits the findings. The open-ended format of the current survey asked teachers to list attributions for elementary students referred for psychoeducational evaluation; thus, the emphasis is on teachers' perceptions of causes of problems in actual students.

Method

Procedure

Teachers were asked to indicate what they believed was the cause(s) of the student's difficulties. Percentages were calculated relative to both the total number of attributions mentioned and the total number of referred students in the sample. In addition, *t* tests were conducted to identify significant differences in student characteristics as a function of attributions.

Coding System

The causes listed by teachers for the referred students' difficulties in school were coded according to five categories, four of which had been identified in the National Education Association (1979) survey; the fifth category (label) encompassed responses referring to a special education category (e.g., learning disabilities). The student and label causes also were categorized using Weiner and Kukla's (1970) four components (i.e., ability, effort, task difficulty, luck). In a third breakdown, the attributions were classified as internal or external relative to the teacher's control.

Results

Types of Attributions

The 105 teachers mentioned 149 separate causes for the 105 referred students. Table 7 is a summary of the percentages of responses within the attribution categories for the current investigation and the NEA survey. Although both sets of data indicate that the most frequently mentioned causes are external to the teacher, the teachers in our sample attributed problems to within-student characteristics with much greater frequency than did the NEA survey teachers. Teachers in our sample, who were giving their responses for actual referrals, attributed the students' difficulties primarily to within-student characteristics (e.g., student + label). Approximately 62% of the listed causes were attributed to the student and 36% to the home; teacher and school causes were mentioned with a frequency of less than 3%. The only school cause given was "unavailability of service"; teacher causes were infrequent (2%) and included references to poor teaching and the teacher's personality or knowledge in handling the student's behavior.

Insert Table 7 about here

Since student (53.7%) and home causes (35.6%) comprised 89.3% of teachers' attributions for the referred students' difficulties, specific symptoms within each of these categories were analyzed (see Table 8). Within the student causes, responses were distributed fairly evenly across the symptoms (range: 8.8% to 21.3%). The three highest ranking symptoms, which comprised over half of this category (52.6%), were symptoms that probably are considered less responsive to intervention strategies (e.g., birth defects, potential). Within the home causes, the top two ranking symptoms, which comprised over half of this category (60.3%), reflected family difficulties that might require more intensive (probably non-school based) interventions.

Insert Table 8 about here

Attributions originally categorized into student or label causes were combined to form the category of within-student characteristics (N=92; 61.7%) and were analyzed further using Weiner's four components (i.e., ability, effort, task difficulty, luck); percentages of responses within each component are listed in Table 9. Over half of these (56.5%) reflected an internal, stable cause, that of the referred student's ability.

Insert Table 9 about here

Attributions also were analyzed according to their frequency of occurrence for each of the 105 referred students; these percentages appear in Table 10. No attributions were listed for 11 students (10.5% of the sample); typical comments included, "I don't know, that's why I referred him," or "I'm not sure of the cause. I just feel he has the symptoms." Of those teachers reporting attributions (N=94), over half (63.8%) perceived the causes for school failure as being inherent to the student, such as attributions related to cognitive ability, learning difficulties, social-emotional problems, maturational delays, and medically-related defects. Almost half of the students (48.9%) were referred for home causes, whereas only four students (3.2%) were referred for reasons thought to be caused by either teacher or school factors. Therefore, 53.2% of the students were referred for causes extrinsic to the student.

Insert Table 10 about here

More than one cause was ascribed for some students; however, no student had more than two different categories of causes mentioned. When students' difficulties were ascribed to home causes, most of the students (37.1%) had this mentioned only once. Students' difficulties ascribed to within-student causes indicated that 58.1% of the students had one or two different student causes listed.

Student Characteristics

Each referring teacher rated the referred student across several dimensions on a Likert scale (see Chapter 2). Attribution categories were coded as present or absent. Within categories (e.g., within-student), dependent t tests were used to compare each mean rating of referred students for whom teachers ascribed that particular cause to the mean rating of referred students for whom teachers did not ascribe that cause. The only significant differences in ratings of student characteristics occurred for home vs. non-home causes. Students whose problems were attributed to home causes received a lower mean rating on being typical of the group ($\underline{t}$ = 2.10, $\underline{p}$ = .038) and behavior ($\underline{t}$ = 2.70, $\underline{p}$ = .008).

Discussion

Several explanations exist for the finding that 97% of the teacher-listed causes for referred students' difficulties in elementary classrooms were to factors external to the instructional or school setting. Of particular interest is the finding that approximately 62% of the "problems" were attributed to within-student deficits or deficiencies. First, Jones and Nisbett's (1971) discussion of the divergent perceptions of actor and observer can be related to the student-teacher relationship. They stress that the observer's view (e.g., teacher's view) emphasizes the causal role of stable dispositional properties of the actor. Therefore, when actors attribute their actions to situational requirements (e.g., classroom environment), observers tend to attribute the same actions to characteristics of the actor, even when it is clear that the actor's behavior is under severe external constraints.

Second, Beckman (1976), in her study of the attributions of teachers and parents for children's performance, found that teachers accept credit for a child's success but avoid blame for a child's failure by attributing it to the situation or the dispositional characteristics of the child. This may shed light on the extremely low percentage of teacher causes (2.0%) paired with the high percentages of dispositional (within-student) characteristics (61.7%) and home causes (35.6%) in the current study, findings that replicate Medway's (1979) research despite the different methodologies employed.

Beckman indicated that teachers never mentioned teaching as a cause on open-ended questions, but did mention teaching, child's ability, and parental and peer influences as important in determining the child's performance on structured questions. Of course, on some of these items, it is impossible to determine whether the teacher was making a self-referant statement or blaming others. The findings of Thurlow and Ysseldyke (1982) suggest that the latter may be the case.

A third potential explanation is that when people prefer personal attributions it may be because it is easier to assign blame than to explain extenuating circumstances affecting behavior (Richey & Richey, 1978). Relating this to Shavelson and Borko's (1979) decision-making model of teaching, it is possible that teachers select one salient factor (e.g., student is not learning) rather than analyzing the integration of the numerous variables (e.g., student characteristics, teaching style, curriculum content, and teaching techniques) that affect the instructional setting. If a teacher does not stop to think of all variables affecting the behavior of the student, the teacher may over-attribute behaviors to qualities of the actor. Kelley's (1971) discounting principle is relevant in this regard. According to Kelley, when specific information about some plausible cause of a given effect is present, the attributor discounts the role of other possible causes in producing the effect. For example, if ability is perceived as an adequate explanation, other causes, such as task difficulty, student effort, inadequate instructional preparation, or inappropriate classroom placement may be discounted. Therefore, the teacher may provide a satisfactory explanation for the event rather than one that is the best of all possible explanations, or the teacher may ascribe a unitary cause and not consider multiple causes. Two factors may be contributing to this pattern: the level of teachers' knowledge regarding the environmental forces operating on a student and the effect of labeling. The way we label a student affects the way behavior is explained. Language contains implicit attributions in itself.

The theory of learned helplessness suggests a fourth explanation. According to this perspective, individuals who do not consider achievement outcomes to be under personal control are experiencing learned helplessness (Dweck, 1975). Teachers attribute student problems to factors external to the school environment (e.g., home and within-student characteristics). Many often cite ability (a stable, internal characteristic) and environmental factors requiring more intensive interventions (e.g., trauma of divorce, parental discipline) as causing students to behave as they do. Teachers may believe they have little control over "what causes" the problem; they may view themselves in a state of learned helplessness, which may result in less personal effort and a low sense of efficacy. For example, 61.5% of the referred students were rated as poor or very poor relative to peers on motivation. If a teacher attributes this difficulty to factors external to his/her control (e.g., student ability or home environment), the teacher may not implement interventions to increase motivation. In contrast, if alternative explanations for the lack of motivation are addressed, the teacher might assume a more active role in intervention.

All of the above explanations suggest possible reasons for the teachers' tendency to attribute students' difficulties to factors that are out of their control. Each of the explanations, in turn, has implications for interventions that could be undertaken with the student prior to referral if the teacher were to see the students' difficulties as a function of the educational environment.

Chapter 5

Teachers' Pre-Referral Interventions

Teachers regularly refer students for psychoeducational evaluation. Algozzine, Ysseldyke, and Christenson (in press) report that nationally from four to six percent of the school-age population is referred each year for evaluation. Teachers contend they refer students for consideration for special education placement only after they have tried (usually unsuccessfully) a number of alternative interventions in the regular classroom. The importance of actually trying alternative interventions prior to referral, and the importance of gathering data on the effectiveness of alternative interventions have been stressed (Bagnato & Neisworth, 1980; Bergan, 1977; Ysseldyke & Regan, 1980). Yet Goodlad and Klein (1974), in their extensive observational study, found little overall evidence that specific interventions were being implemented in schools.

The effectiveness (or lack of effectiveness) of interventions may have a direct bearing on whether a child is referred for psychoeducational evaluation. Since approximately 75% of evaluated students are placed in special education (Algozzine, Christenson, & Ysseldyke, in press), the pre-referral interventions attempted by a teacher potentially play a crucial role in determining whether a student receives special services.

To date, there has been no systematic attempt to document specifically the kinds of interventions regular classroom teachers use prior to referring students for psychoeducational evaluation. This chapter describes the interventions that teachers reported using prior to referring a student for psychoeducational evaluation.

Method

Procedure

Teachers were asked to list pre-referral interventions attempted to modify the problem behaviors, the length of the implementation period, the titles of professionals with whom they had spoken concerning referred students, and to designate those interventions that were the result of a staffing conference. Descriptive data (e.g., percentages) are provided on the types, combinations, and duration of pre-referral interventions, and the individuals spoken with prior to the formal referral. Differences in teachers' ratings of learning characteristics for the referred students as a function of pre-referral interventions were identified using t tests.

Coding System

Classroom interventions implemented by teachers prior to formal referral were coded into six categories: methods, materials, behavioral, structural change, specialized help, and informational. "Methods" was coded when the teacher listed techniques used to teach an academic lesson or affect behavior; "materials" was coded when specific materials were identified. Interventions indicating a specifically defined approach to change identified behavior using positive or negative reinforcers were coded as "behavioral," while changes in the amount of structure provided for the student were coded as "structural change." "Specialized help" was coded when the student was involved in additional specialized assistance; the "informational" category indicated that the teacher requested additional information and consultation regarding the student.

Results

Pre-Referral Interventions

Types of interventions used. The 105 teachers listed a total of 328 pre-referral interventions. Descriptions and frequency of occurrence of the six categories appear in Table 11. The three top ranking pre-referral interventions were methods (29.3%), behavioral (22.0%), and structural change (17.4%). The remaining three types of pre-referral interventions occurred with a frequency between 5% and 15%.

Insert Table 11 about here

Since the methods category accounted for the highest percentage of pre-referral interventions, this category was broken down further into interventions that reflected individual attention, small group placement, curriculum adjustments, orienting the child to the task, affective responses to the child, and the child receiving additional practice. The frequencies and percentage occurrence for these categories are given in Table 12. Individual attention (25.0%), curriculum adjustments (19.8%), and orienting the child to the task (18.8%) were the most common forms of method interventions.

Insert Table 12 about here

The 328 pre-referral interventions also were analyzed according to three task variables (e.g., method, sequence, content) that Samuels

(1981) has suggested influence learning. This analysis was completed by simply combining original categories. Method variables (methods and behavioral) assist a teacher in deciding how to teach, sequence variables (structural change and specialized help) assist a teacher in deciding when to teach, and content variables (informational and materials) assist a teacher in deciding what to teach. The pre-referral interventions described by the teachers indicated a primary interest in interventions for the "how" of teaching; 51.3% were related to decisions on how to teach, 32.3% on when to teach, and 15.9% on what to teach.

The extent to which the teachers' pre-referral interventions complied with systematic application of four learning principles also was addressed. The four principles included: practice (e.g., adequate exposure and reinforcement), distributed practice (e.g., frequent short practice sessions as opposed to massed practice), feedback (e.g., specific feedback to the student regarding the quality of his/her performance), and the use of different materials to develop "broader strategies" for understanding the concept of skill. In order for the pre-referral intervention to be coded as one of the four learning principles, the teacher had to stipulate the principle or the meaning as outlined. This criterion was established because of the highly inferential nature of interpreting the handwritten comments.

Of the 328 pre-referral interventions, only one was identified that complied with any of the described learning principles. One teacher listed "practice lettering" for a 10 year old, fourth grade boy. Several other of the teachers' interventions could have been inferred as reflecting a learning principle. For example, a teacher's use of "send words home" or ten minutes of individual tutoring" could imply practice. Similarly, the use of a checklist or change of materials could imply feedback or development of "broader strategies"; however, they also could imply techniques utilized less systematically out of frustration. Thus, it is possible that the number of interventions reflecting systematic application of learning principles is underestimated. Even so, the investigators believe that the number still would be very low (i.e., less than 5% of interventions).

Combinations of interventions used. The majority of the teachers listed several pre-referral interventions; therefore, combinations of interventions were of interest. The data in Table 13 indicate that most teachers attempted combinations of pre-referral interventions from either two (36.2%) or three different categories (31.4%). Combinations of pre-referral interventions from two or more different categories accounted for the pre-referral interventions of 75.2% of the teachers.

Insert Table 13 about here

Duration of interventions and conferences. As part of the survey, teachers were asked to note (a) which of the pre-referral interventions they had implemented were the direct result of a staff conference, and (b) the duration of implementation. Of the 328 interventions used by the 105 teachers, only 13.4% were the direct result of a conference; 28.6% mentioned a time period of implementation. The time periods noted were most often non-specific (e.g., "weeks" or "months").

Individuals Spoken to Concerning the Referral

Teachers also were asked to list the individuals with whom they had spoken concerning the referred students. Of the 105 teachers in the sample, seven (6.6%) did not report speaking to any other persons. Most teachers spoke with more than one professional; 98 teachers (93.4%) accounted for the 362 individuals with whom discussions occurred. The special education teacher (17.9%), principal (16.9%), parents (10.2%), other classroom teachers (9.1%), and school psychologist (8.6%) were the top five ranking individuals. The remaining individuals (e.g., social worker, speech therapist, nurse) each comprised 5% or less of the listed individuals.

Student Characteristics

Teachers rated the referred student relative to non-referred peers on several characteristics (see Chapter 2). Pre-referral categories for each student were coded as present or absent. Within categories (e.g., methods), dependent t tests were used to compare mean ratings of referred students for whom teachers had implemented that particular pre-referral intervention (e.g., methods) to mean ratings of referred students for whom teachers had not implemented that intervention.

Seven significant relationships were revealed. When method interventions were implemented, the referred students' behavior was rated more typical of the group ($t = 2.07$, $p = .041$). When structural interventions were implemented, the referred students were rated lower on speed of learning ($t = 2.08$, $p = .040$) and ability to learn ($t =$

2.32, _p_ = .022). When behavioral interventions were implemented, the referred students were rated lower on functioning in the group (_t_ = 2.54, _p_ = .012), being typical of the group (_t_ = 2.06, _p_ = .042), motivation (_t_ = 2.39, _p_ = .018), and behavior (_t_ = 6.54, _p_ = .000).

Discussion

The results suggest that (a) the burden of pre-referral intervention rests on the teacher, (b) there is tremendous variability in the pre-referral interventions attempted, and (c) the interventions teachers report implementing are lacking in accountability. The categories of pre-referral interventions that were identified reflected teacher-directed actions or those involving other personnel. Approximately 75% of the pre-referral interventions reported by teachers on the survey were included in the methods, behavioral, structural change, and material categories, all of which are dependent on the teacher for implementation. Teachers appear to perceive themselves as responsible for pre-referral intervention.

It is possible that pre-referral interventions are the product of input from various professionals and simply implemented by the teacher, making teachers' perceptions of their responsibility somewhat exaggerated. The issue of perceived responsibility is addressed by the results presented on other individuals spoken to concerning referral, and the extent to which pre-referral interventions were the direct result of a conference. The great majority of teachers (93.4%) report speaking to at least one professional concerning the referral but only 13.4% of pre-referral interventions attempted were reported as the direct result of a conference. Referring teachers primarily reported seeking out the special education teacher and principal; however, parents, other classroom teachers, or school psychologists also were consulted to a lesser degree. Clearly, teachers seem to share responsibility for pre-referral intervention with other personnel. However, it is not clear whether these contacts were casual or well-defined consultative sessions, or whether they resulted in useful strategies for teacher action. Issues concerning the role of consultation in the referral for psychoeducational assessment process are raised by the findings. For example, is it necessary for consultation to be of a formal, well-defined nature, or are informal, hallway-type conversations adequate? Further research is needed to address these issues.

Bagnato and Neisworth (1980) emphasize that for interventions to be accountable, there is a need for measurement of developmental or behavioral change during a defined time period. Only 28.6% of the pre-referral interventions reported were associated with a time period (often non-specific) and few mentioned any measures of success. Those pre-referral interventions that teachers implemented are found wanting when subjected to basic criterion for accountability. Teacher biases in responding to the survey most likely would operate to enhance the perceived accountability of their responses; the lack of accountability of the interventions reported suggests an area where consultative efforts may be fruitful. Since consultative efforts may increase intervention accountability as well as reduce the referring teacher's burden in dealing with a "problem" student, the need for research on consultation and its effects on pre-referral intervention again are indicated.

Teachers' reports of their pre-referral intervention activity suggest the following scenario: The teacher notices a child with a problem; after discussing it informally with a few in-school professionals and the parents, two or three interventions may be implemented. The interventions would most likely be a combination of something to change behavior (behavioral strategies), something the teacher used as a new way of reaching the child (methods), and some change in the structure of the child's program in the classroom (structural change). Most interventions are implemented for a nonspecific time period and seldom are data collected on behavior change. The lack of accountability, specified behavioral changes, measures of success, and formal consultation in the intervention process may combine to weaken the effectiveness of attempted interventions.

This scenario suggests possible procedures for pre-referral intervention. Before students are referred for evaluation, teachers should be able to document the interventions they have tried and provide data on (a) the particular behavior(s) they tried to change, (b) the level of behavioral change that will enable the child to remain in the regular classroom, (c) the time period of implementation, (d) the role(s) of other professional(s) and community personnel in implementing and monitoring the interventions, and (e) the amount of change produced by the intervention. Given the relative success or failure of such interventions, psychoeducational evaluation might not be necessary; if necessary it would be enhanced by the information collected in the intervention process.

The results of this survey imply a need for (a) consultative efforts at the pre-referral level that deal with teachers' perceptions and implementation of interventions, and (b) further research addressing models of consultation and the effects of pre-referral interventions on eventual evaluation and placement of students by child study teams.

Chapter 6

Teachers' Desired Outcomes for Referral

Sarason and Doris (1979) noted that the decision to refer starts with "somebody [e.g., teacher] thinking something is wrong with someone else [e.g., student]." It has been shown that "thinking something is wrong" may be as much a function of teachers' perceptions of pupil behaviors and characteristics as it is of the pupils' actual behaviors and characteristics (Kornblau & Keogh, 1980). It is clear that teachers' perceptions are intimately related to the expectancies that they hold for students' performance and that ultimately teachers' perceptions and expectancies influence their interactions with students and subsequent student performance (Brophy & Good, 1970; Dusek, 1975; Kornblau & Keogh, 1980; Silberman, 1969).

While it is clear that teachers' perceptions and expectancies influence what they think is "wrong" with a child and their behavior toward that child, the extent to which these expectancies may ultimately be related to the teacher's role in the referral process is not clear. Given the importance placed on the decision to refer a student, a decision that may have lifelong impact on that child, it is necessary to document teachers' perceptions of referral. It is important to distinguish between what a teacher thinks will happen (expectation) and what a teacher wants to happen (desired outcome). Questions concerning what teachers expect from a referral are related to the institutional constraints influencing the decision to refer a student (Christenson, Ysseldyke, & Algozzine, 1982). The purpose of this study was to describe teachers' perceptions of the referral process that reflected their biases. Therefore, teachers were asked to indicate what they wanted to happen as a result of their referrals.

Method

Procedure

The data analyzed in this chapter included responses to two open-ended questions concerning the teachers' desired outcomes for referral and assessment. Teachers were asked to respond to: (a) What do you want to happen as a result of the referral, (b) What do you want to happen as a result of the assessment? Percentage data are provided on the types of outcomes teachers wanted from referral and assessment; desired outcomes for referral are compared to desired outcomes for assessment. Differences in ratings of student characteristics as a function of desired outcomes are examined also.

Coding System

Teachers' desired outcomes for both referral and assessment were coded with the same coding system; responses were coded into one of seven categories: placement, assessment, decision making, educational strategies, student behavior change, help in-school, and help-out-of-school. Three categories, placement (i.e., teacher clearly wants student to receive some special services), assessment (i.e., teacher clearly wants student to be tested), and decision making (i.e., teacher wants to receive information to make instructional and placement decisions), are related to due process. Educational suggestions indicates that the teacher wants to receive suggestions regarding how she/he can teach the student, while student behavior change indicates that the teacher wants the referral to result in the student changing his/her behavior. Responses were coded in these two categories only when no testing or placement outcomes were suggested by the teachers. Finally, both of the help categories indicated help for the student of a very general nature; they differed in terms of where the help would be provided.

Results

Types of Desired Outcomes for Referral

Teachers were asked to list what they wanted to happen as a result of their referral of a particular student. The 105 teachers listed a total of 130 desired outcomes. Frequencies and percentages of responses are presented in Table 14. Clearly, most outcomes that teachers desired from referral had to do with placing the child in special services (30.0%). The assessment (18.5%), decision making (17.7%), and educational suggestions (11.5%) categories each accounted for a substantial proportion of responses. Since some teachers listed more than one outcome, the responses also were categorized in terms of the percentage of the 105 teachers listing a particular outcome. This analysis produced the same ordering of outcome categories, but different percentages--placement (37.1%), assessment (22.9%), decision making (21.0%), educational suggestions (14.3%), student change (11.4%), help-in-school (8.6%), and help-out-of-school (7.6%).

Insert Table 14 about here

Types of Desired Outcomes for Assessment

Teachers listed what they wanted to happen if the student was assessed. A total of 119 desired outcomes was listed; the breakdown of these is presented in Table 15. The most frequently occurring desired outcome was provision of special education services. However, the second ranking desired outcome was educational suggestions for use by the classroom teacher. Seldom were placement and educational suggestions both listed for a referred student. One-fifth of the outcomes indicated that the teacher wanted information that would aid placement and instructional decisions; therefore, 79.8% of the outcomes related to program placement or instructional interventions.

Insert Table 15 about here

In their responses to the desired outcome question, 19 (18.1%) teachers indicated they believed testing would provide information needed to deal with the referred student. Their handwritten comments reflect their beliefs about testing. A teacher of a third grade boy wrote, "I want this student tested in order to find a proper placement." A teacher of a sixth grade boy referred primarily for academic reasons wrote, "Hopefully, testing will indicate specific remedies for the student's difficulties." Another teacher wanted an assessment as the result of her/his referral because "Hopefully, the parents will realize that the student needs help and that this testing will prove this." A teacher of a third grade boy referred for auditory processing deficits indicated, "To find out, if in fact this is his problem. Through testing given, it should indicate one way or the other." Finally, one teacher suspected an undetected learning disability that "may only show up through more specific IQ testing and diagnosing the scores."

Desired Outcomes for Referral and Assessment

In analyzing relationships between desired outcomes for referral and desired outcomes for assessment, only the outcomes accounting for greater than 10% of the responses and 10% of the teachers were considered. Thus, analyses presented here are concerned with only four desired outcomes: placement, assessment, decision making, and educational suggestions.

The categories of teachers' desired outcomes for referral and for assessment were compared using chi square analyses. Of the 39 teachers who stated they wanted placement as an outcome from referral, 74% wanted placement from assessment (p = .000); only 12.3% wanted educational suggestions from assessment (p = .029), and only 7.7% wanted a decision-making outcome from assessment (p = .014).

Of the 24 teachers who wanted assessment as an outcome from referral, 58.3% wanted placement as an outcome from assessment, 33.3% wanted a decision-making outcome, and 20.8% wanted educational suggestions; these percentages were not statistically significant.

Of the 23 teachers who wanted a decision-making outcome, 52.2% wanted a decision-making outcome from assessment (p = .000) and 30.4% wanted placement as an outcome from assessment (p = .014). Of the 15 teachers who wanted educational suggestions, 66.7% also wanted such suggestions from assessment. Teachers primarily tended to want the same thing from referral and assessment.

Student Characteristics

Each teacher rated the referred student across several dimensions on a Likert scale (see Chapter 2). Referral outcome categories for each student were coded as present or absent. Within categories (e.g., placement), dependent t tests were used to compare mean ratings of referred students for whom teachers had that particular desired outcome to mean ratings of referred students for whom teachers did not desire that outcome. The significant relationships are summarized in Table 16.

Insert Table 16 about here

Eight significant differences were found. When placement was the desired outcome, the referred student was rated lower on functioning in the group (t = 2.27, p = .026). When assessment was the desired outcome, the referred student was rated higher on functioning within the group (t = 2.68, p = .009), and higher on being typical of students in the group (t = 2.48, p = .015). When decision making was the desired outcome for referral, the referred student was rated higher on the following: functioning within the group (t = 2.04, p = .043), being typical of students in the group (t = 2.54, p = .012), motivation (t = 2.93, p = .004), behavior (t = 2.92, p = .004), and maturity (t = 2.48, p = .015). No significant differences were found in student characteristic ratings for students for whom educational suggestions was the desired outcome as compared to students for whom this was not a desired outcome.

Discussion

The results presented in this chapter demonstrate that teachers' perceptions of the referral process differ in terms of their desired outcome for the process. In this study, certain types of students (as compared to peers in the reading group) were associated with different teachers' desired outcomes for referral. These results suggest a continuum of "restrictiveness" that reflects the relative degree of direct involvement with the student that the referring teacher desires. The order of restrictiveness of outcome from most to least restrictive may be placement, assessment, and decision making.

Teachers who want placement outcomes rate the referred student lower on functioning in the group compared to teachers not having placement outcomes. Teachers wanting assessment outcomes rate referred students higher on group functioning and higher on being typical of the group compared to teachers seeking other outcomes. Decision-making outcomes were associated with the student being rated higher on functioning in the group, higher on being typical of the group, and higher on motivation, behavior, and maturity (considered to reflect task readiness factors) relative to teachers not seeking decision-making outcomes.

As the desired outcome from referral becomes less restrictive, it appears that the referring teacher is willing to accept more responsibility for direct involvement in programming for the student. Correspondingly, student characteristics within a reading group that are associated with teacher involvement (less restrictive desired outcomes) are higher functioning in the group, typical of the group, motivation, behavior, and maturity.

It is interesting that "speed of learning" and "ability to learn" were student characteristics not associated with any desired referral outcomes, while group functioning and task readiness skills were associated with outcomes. Apparently, either teachers perceive student learning characteristics as subsumed within "functioning in the group" or teachers' desired outcomes for referral are in reality more related to group functioning and student task readiness than to student learning characteristics. Teachers may believe they can control for or tolerate missing academic skills, but require student receptivity for learning in order to teach effectively. These results are in agreement with Rubin and Balow's (1971) study demonstrating that classroom exclusion was more a function of the student's behavior than performance.

Desired outcomes for referral appear to represent the teachers' desired outcomes for the entire referral and psychoeducational assessment process. For example, placement outcomes for referral are associated with placement outcomes for assessment and negatively related to educational suggestions. Decision-making outcomes for referral are associated with decision-making outcomes for assessment and negatively associated with placement outcomes for assessment. It appears that teachers in this sample perceive referral and assessment as "synonymous" processes. In addition, 18% of this sample of teachers indicated testing was necessary to identify the appropriate program placement or pattern of strength and weaknesses, or for diagnosis and for generation of specific instructional strategies. There is no established empirical evidence that tests can validly diagnose handicapping conditions that lead to specific program placements (Shinn, Ysseldyke, Deno, & Tindal, 1982). There also is no valid documentation of how test scores are transferred to instructional strategies. It may be that some teachers believe tests can deliver more than is warranted. Implications for training and teacher expectations are evident.

If the decision to refer a student is the most important decision in the referral-to-placement process (Ysseldyke & Algozzine, 1982), then the implication is for consultation and intervention to occur when the regular classroom teacher first notices a problem. This study has raised the possibility that different teachers' desired outcomes for referral may be a function of both teacher tolerance and student characteristics. That is, while the responses were a reflection of teacher perceptions, these perceptions were shown to be related to student characteristics. Given the possibility that a "student's problem" may lie in his/her behavior as well as the environmental tolerances of that behavior, an ecological approach to intervention is warranted (Algozzine, Schmid, & Mercer, 1981; Rhodes, 1970; Sarason & Doris, 1979).

In summary, the learning characteristics of the student may not play an important role in the desired outcomes a teacher has for referral even though a large percentage of reasons for referral are learning related (see Chapter 3). Task readiness and group functioning skills appear more directly related to the referring teachers' desired outcomes than learning characteristics. Hence, intervention that deals strictly with teaching a child achievement-oriented skills or excludes the child from the classroom may not address the real factors that affect the teacher's perceptions of referring that student.

Chapter 7

Teachers' Desired Changes for Referred Students

Student characteristics have been shown to be an important determinant of classroom interaction; teachers' attitudes (e.g., Brophy & Good, 1974; Willis, 1972), expectancies (e.g., Dusek, 1975), and behaviors (e.g., Maddox-McGinty, 1972) are influenced by a number of interpersonal factors (e.g., student behavior and physical appearance, student achievement). Teacher effectiveness also has been shown to vary as a function of these same factors (e.g., Thelen, 1967; Good & Dembo, 1973). Rist (1970) believes that teachers have an image of the "ideal student" and that this image influences their evaluations of and decisions about individual students. According to Kornblau and Keogh (1980) "teachers' conceptions of teachability serve as a standard or model against which the attributes of individual children are compared" (p. 88). The discrepancy between ideal and actual attributes of students may influence a teacher's decision to refer a student for special education consideration.

Historically, students who were judged as not fitting into the regular classroom were excluded through placement in special education. Due to recent legislation (PL 94-142), special education students are mainstreamed in regular education classes whenever feasible. However, the response to these students continues to be some form of exclusion, as suggested by the "two box theory" (Reynolds, 1977).

Research involving nonhandicapped and gifted students has supported the hypothesis that teachers have *a priori* perceptions that form a model for ideal student behavior. Researchers have not investigated the extent to which teacher-valued student attributes influence referral for evaluation and placement. Therefore the variable of particular interest in this chapter was teachers' perceptions of the ways in which referred students must change to fit into current classroom structures.

Method

Procedure

Teachers responded to the question, "In your judgment, how would the student have to change to fit into your class or the grouping structure?" Percentage data are provided on teachers' desired changes. The teachers' desired changes for student behavior are compared with teacher ratings of characteristics of the referred student relative to non-referred peers.

Coding System

Teachers' desired changes for the referred student to fit within the mainstream grouping structure were coded into four categories: academic, task readiness, behavior, and extra service. Changes reflecting student receptivity and preparedness for learning were coded as task readiness, while academic changes involved improvement in any specific academic area or general ability. Behavioral changes involved improvement in student behavior; these changes were consistently for aggressive, disruptive behaviors. Extra service involved individualized special service or tutoring being provided for the referred student.

Results

Types of Desired Changes

The 105 teachers listed 171 desired changes in the referred students; these are summarized in Table 17. Over half of the changes (52.0%) were characteristic of task readiness or preparation variables such as following directions, willingness to learn, learning to work independently, complying with teaching instructions, sitting still, and staying on task. One quarter of the changes (25.2%) related to academic areas, such as improving reading skills, performing at grade level, or improving overall comprehension. Improvement in student behavior or provision of additional special or tutorial services were mentioned less frequently.

Insert Table 17 about here

Several of the teachers' written comments suggested the importance of the student being a member of a group in order to avoid referral. Examples included, "He would have to work within a small group and bring some basic skills as we just couldn't carry him in such a large classroom," or "needs to work in a group situation." Several students were referred because of "an inability to work in the classroom setting," or "doesn't function well in a group situation." As in the stated reasons for referral, teachers' desired changes for the students often were subjective. For example, such required changes as "increase appropriate behavior," "increase ability," and "apply the skills she is learning," are dependent upon the teacher's perception for accurate interpretation. Some teachers' comments reflected frustration, such as "this student would have to change totally." The general tone of the classroom teachers' desired changes for the referred student is represented by one teacher's comment, "She needs to be able to apply her learning in an independent, written situation without the teacher there."

Since multiple responses were possible, the teachers' desired changes also were analyzed in terms of the percentages of students that must change in each area. The percentages of students required to make each type of change to fit into their mainstream grouping structures appears in Table 18. Nine teachers (8.6%) did not respond to the desired change question. Of those teachers responding, over half (60.4%) wanted the student to be more receptive and prepared for the teacher's instruction and assignments. About one-third (35.4%) expected their students to improve their academic skills; basic skills most frequently were cited. Changes in the student's behavior and the program provided for the student were mentioned for less than 25% of the students.

Insert Table 18 about here

Student Characteristics

Teachers' ratings of the referred students relative to non-referred students on a variety of characteristics (see Chapter 2) were analyzed as a function of the desired changes for students. Desired change categories were coded as present or absent. Within categories (e.g., task readiness), dependent t tests were used to compare mean ratings of referred students for whom teachers had that particular desired change to mean ratings of referred students for whom teachers did not have that desired change.

Significant differences were found in three desired change categories. Students for whom teachers indicated an academic change was necessary to fit into their classrooms were rated lower on ability to learn (t = 3.76, p = .000) and speed of learning (t = 3.00, p = .003) and higher on behavior (t = 3.04, p = .003). Students for whom teachers indicated a task readiness change was required were rated lower on behavior (t = 2.21, p = .029), maturity (t = 2.30, p = .023), and motivation (t = 2.30, p = .023). Finally, students for whom teachers indicated a behavioral change was necessary were rated higher on ability to learn (t = 2.69, p = .008) and speed of learning (t = 2.39, p = .019) and lower on behavior (t = 3.94, p = .000) and maturity (t = 2.20, p = .030).

Discussion

The results presented in this chapter revealed that student changes required by teachers for the referred student to fit within the mainstream classroom structure most often reflect task readiness behaviors. It seems that regular class teachers perceive their role as that of "teacher" and less often as "behavior manager," or "disciplinarian." Teachers were less concerned about adapting for students with academic skill deficits within their classrooms; they were concerned approximately twice as often about having to teach a non-receptive student. It is interesting that classroom grouping possibilities for a referred student revolved more around the student's receptivity for learning than the student's academic skill level. This suggests that if a student is perceived by his/her teacher as cooperative and willing to try to learn by completing assigned tasks, the student can fit into the classroom structure. The fact that over half of the teachers indicated the referred student must change his/her behavior by following directions, completing work, and displaying a positive attitude suggests that teachers value student receptivity, and in accordance with Kornblau and Keogh (1980), view this as a crucial attribute for their image of the "teachable student." These desired student behaviors may be an integral part of teachers' expectations for classroom functioning; the relationship of teacher-rated student characteristics and teachers' desired outcomes discussed in Chapter 6 lend credence to the notion of the "teachable student."

There are several explanations for the finding that student receptivity is valued by classroom teachers. It may be that teachers can tolerate or have the knowledge to control for academic skill deficits more than task readiness deficits. It may be that interventions such as peer tutoring or cooperative learning (Johnson & Johnson, 1975) are more feasible when a student is receptive to the teacher's instruction. It also may be that regular class teachers believe that their job is to teach, not to get students ready so that they can teach; this seems to reflect the focus of teacher training in regular education.

Finally, it appears that referred students may violate their classroom teachers' concept of "teachability" (Kornblau & Keogh, 1980). Referred students most often needed to change their receptivity for learning in order to fit within the classroom grouping structure. Over half of the teachers' desired changes for the referred student related to such changes as following directions, completing work, and attending to classwork. This emphasis on "student receptivity" indicates several areas of teacher-centered consultation (Meyers, Parsons, & Martin, 1979) in which child study teams could be involved. For example, child study team members could consult with teachers about interventions for students with poor task completion. Since the question on the survey asked how the student must change, responses indicating teacher or system changes could not be expected. However, in the "real world," child study teams must remember that it is not enough to identify how the student must change. A change must occur within the educational environment (e.g., teacher, classroom) to mediate student change.

The vast majority of students served in special education are mainstreamed for most of their school day. Therefore, the real intervention for child-study teams may be an effective student-teacher match. The teacher's image of the "teachable" student may be a crucial variable in assisting teams to achieve this match. The importance of assessing the perceptions of the classroom teacher was indicated by a teacher who referred a second-grade boy for emotionally-manifested and behavioral reasons. She wrote, "Somehow, my classroom did not meet the needs of this child - whether due to size of class, style of learning - personality of teacher???"

Chapter 8

Sex Differences in Referral Factors

The professional literature repeatedly reports that two to four times more boys than girls are enrolled in special education classes for mildly handicapped students. Further, boys are said to demonstrate significantly more academic and behavior problems than girls. In two recent investigations (Davis, 1978; Gregory, 1977), it was reported that there are differences in the reasons for referral as a function of sex. Girls were referred more often for academic problems than for behavior problems, whereas the opposite was true for boys. On the other hand, Robbins et al. (1967) reported that both sexes of students were referred most often for "behavior problems," while Gilbert (1957) and Nicholson (1967) reported that both sexes were referred for "academic problems."

Previous studies have examined reasons for referral through artificial case studies or simply by a kind of "retrospective counting," without considering the complexity of the referral decision. We have argued the decision to refer a student is influenced by many factors, including the behaviors, characteristics, or traits exhibited by the student, the teacher's perception of the causes of the student's academic and behavioral performance, the extent to which the teacher is successful in intervening within the regular classroom, the teacher's desired outcomes for the referral, and the teacher's desired change for the student.

The importance of including sex as a marker variable in learning disabilities research has been addressed by Keogh et al. (1980), who argued that generalizations about learning disabled girls are limited due to the paucity of female research subjects. Specifically, they indicated that similarities and differences between the sexes on a variety of psychological and behavioral indices are unknown due to the exclusion of sex as a marker variable in research.

The reported low incidence of learning disabled girls suggests sex-related differences in learning disabilities. In addition, sex of the student may be yet another factor influencing a teacher's referral decision. This investigation was conducted to ascertain the extent to which various teacher reported factors differed as a function of the sex of the referred student.

Method

Procedure

Of the 105 referred students, the sex of 103 students was identified; 30 were girls (29%) and 73 were boys (70%). The frequency of teachers' referral reasons, attributions, classroom pre-referral interventions, desired outcomes for the referral, and desired student changes were described for girls and boys. Tests of proportions were used to assess the significance of differences between boys and girls on each factor.

Results

In this sample, boys were referred for psychoeducational evaluation and special education consideration 2½ times more often than girls. There were differences in referring teachers' mean ratings of girls and boys on three student characteristics (see Chapter 2). Teachers more often disagreed that girls' ability to learn and speed of learning represented that of their reading group peers. On the variable ability to learn, girls' mean rating was 3.6, boys' was 3.2; for speed of learning, girls' mean rating was 4.1, boys' was 3.6. Sixty percent of the teachers referring a girl disagreed that girls' ability to learn represented their peers, while 38% of those referring boys disagreed. About half of the teachers referring a boy (56.4%) disagreed that the student's speed of learning was characteristic of peers, while over four-fifths (82.7%) referring a girl disagreed. Teachers' mean rating for behavior was higher ($\overline{X}$ = 3.5) for boys than girls ($\overline{X}$ = 3.0), indicating teachers disagreed to a greater degree that boys' behavior was characteristic of peers. This difference appears because girls were rated more often as similar to peers in the reading group; 46.6% of the girls were rated as similar in behavior, while only 22.2% of boys were so rated.

The frequency and percent occurrence of teachers' responses to questions regarding referral reasons, attributions, pre-referral interventions attempted, desired outcomes, and desired student changes for boys and girls are presented in Table 19. The responses are listed in rank order according to their frequency for boys. Since boys were represented in this sample 2½ times as often as girls, we expected the frequency of teachers' responses to be over twice that for girls. Therefore, any category within the five referral factors (e.g., reasons, attributions) for which there was not approximately double the expected ratio was of primary interest.

Insert Table 19 about here

Regarding referral reasons, nine times the number of behavioral reasons were present in boys; however, the behavioral reasons for both boys and girls represented only 7% of the teachers' total reasons for referral (i.e., 30/426). Attention-related reasons were mentioned over three times more often for boys than girls. While perceptual-motor and language reasons were represented by a higher proportion of boys than expected, they occurred with an even lower frequency than behavior disorders and were never mentioned as a primary reason for referral. The mean number of referral reasons was similar for boys and girls; on the average, both were referred for four reasons.

For attributions, no differences in the expected ratios were revealed. The mean number of attributions for boys' and girls' school difficulties was similar (i.e., $\overline{X}$ = 1.4)

Regarding pre-referral interventions, teachers reported greater use of behavior management strategies with boys; five times the number of behavior management strategies were implemented with boys than girls. Three pre-referral interventions were implemented on the average for boys ($\overline{X}$ = 3.2) and girls ($\overline{X}$ = 2.9).

Regarding teachers' desired outcomes for their referral, placement was desired slightly less than five times as frequently for boys than girls. In addition, when teachers desired specific instructional strategies for classroom use (i.e., educational suggestions) they were most often for boys. Teachers desired an average of one outcome for boys and girls.

Although the frequency of additional support services as a desired change for the student to fit into current grouping structures was mentioned most often for boys, this category represented less than 10% of the teachers' desired student changes. The mean number of teachers' desired changes for boys and girls was similar (i.e., $\overline{X}$ = 1.7 for boys, $\overline{X}$ = 1.4 for girls).

The rank order of the top two categories in reasons (i.e., learning-related, emotionally-manifested), attributions (i.e., within student, home), and desired changes for the referred student (i.e., task readiness, academic) did not differ for boys and girls (see Table 19). There was a different rank order of teachers' pre-referral interventions and desired outcomes, however. The top three ranking interventions for boys were methods, behavioral strategies, and structural changes; for girls, the rank order was methods, structural changes, and additional help. While teachers clearly ranked placement as a first desired outcome for boys, two other categories (i.e., assessment and decision making) tied with placement as the preferred outcome for girls.

Significance of Sex Differences

In order to assess the statistical significance of student sex differences for teachers' reported reasons, attributions, pre-referral interventions, desired outcomes from referral, and desired changes for student behavior at the point of referral, the test of equal proportions was utilized. Within each of the five referral factors, the number of girls classified/total number of valid cases for girls was compared with the number of boys classified/total number of valid cases for boys. A one-tailed test (z = 1.65) was used to assess the difference between boys and girls. Of the 30 comparisons, five were statistically significant ($p < .05$). Teachers referred proportionately more boys ($z = 2.28$, $p < .05$) for behavior disorders, used structural interventions more with girls ($z = 2.05$, $p < .05$), used behavioral strategies more with boys ($z = 1.98$, $p < .05$), and desired placement ($z = 1.81$, $p < .05$) and educational suggestions ($z = 1.87$, $p < .05$) more for boys. Teachers' attributions for school difficulties and desired student changes did not differ significantly as a function of the student's sex.

Discussion

The findings of this study indicated that boys were referred at a much higher rate than girls, and that both sexes were referred most often for academic problems. The findings did not support the investigations of Davis (1978), Gregory (1977), or Robbins et al. (1967). The fact that inconsistencies among investigations regarding sex differences in referral reasons continue to be present may be due in part to the specific samples studied.

Teachers' mean ratings of the referred girl or boy relative to peers in the reading group suggest that boys' behavior was rated more discrepant from their peers than girls' behavior. It is interesting that the referred girls were rated lower on ability to learn and speed of learning. Educators (e.g., Keogh et al., 1980) have hypothesized that lower referral rates for girls may be due to their better behavior, which serves as a mask for learning difficulties. The teachers' mean ratings of students in this sample lend some credence to that hypothesis. Similarly, Mirkin, Marston, and Deno (1982) compared students referred through the traditional teacher-referral process with those referred through an alternative process based upon weekly measurement of academic behaviors. They found a tendency of teacher-referred girls to be rated as having more behavior difficulties than girls referred in the same classroom through the continuous evaluation model. Thus, teachers' referrals may be subject to the biasing influence of the students' behavior.

The current investigation extended the typical approach to studying sex differences in referral reasons by looking at additional teacher reported factors. Boys and girls did not differ in terms of the mean number of reasons, attributions, pre-referral interventions, desired outcomes, or desired changes reported by teachers. Therefore, quantity appears to have no affect on referral decisions in this sample. We would suggest that if sex differences truly influence a teachers' referral decision it may be because of the logical pattern of significant differences identified. It appears that teachers refer proportionately more boys for behavior problems, that teachers use behavioral management strategies more with boys, that teachers desire placement (perhaps to help behavior) and educational suggestions (perhaps to aid during mainstream instructions) more with boys. In contrast, teachers use structural changes such as peer tutor, seat change, or grouping change more for girls, a pre-referral intervention that may benefit referral concerns related more to learning and less to management concerns.

Two studies offer support and explanations for the consistent association of boys with behavior problems. Caplan and Kinsbourne (1974) suggested that boys' greater difficulty in learning is affected by their reaction to school failure. While failing girls attempt to please the teacher with good, socially acceptable, and teacher-valued behavior (suggested as a feminine attribute), failing boys direct their interest and energy to activities external to the classroom, such as sports or leadership. These activities were less valued by both the teacher and peers, thereby setting up a possible vicious cycle in which a boy receives little reinforcement or approval either for classroom performance or behavior. Consequently, boys' behavior may be "on the extremes" of what a teacher perceives as acceptable for classroom management. Schlosser and Algozzine (1979) found that the behaviors more prevalent in boys (e.g., acting-out, disruptive behaviors) were perceived as significantly ($p < .01$) more disturbing to classroom teachers than those more prevalent in girls. Therefore, it appears that behaviors more characteristic of boys appear to be of greater concern to teachers because of their disturbingness with regard to class management.

Several studies (McCarthy & Paraskevopoulos, 1969; Mirkin et al., 1982; Reinert, 1976; Rubin & Balow, 1971; Werry & Quay, 1971) substantiate the finding that boys consistently outnumber girls in referral for behavior problems. The current findings that twice as many boys were referred overall and that significantly more boys were referred for behavioral concerns raises an interesting question: Are boys really more "at risk" in our educational system? If so, is this due to an inherent characteristic of the student or a lack of tolerance within the educational system (e.g., teacher tolerance, curriculum)?

Educational implications for this question have been addressed from an ecological perspective (Algozzine, 1977; Rhodes, 1970; Schlosser & Algozzine, 1979; Swap, 1974). This approach suggests that matching teachers who are tolerant of certain characteristics to students who evidence those characteristics may be an effective way to optimize school experiences for more students. Increasing teachers' awareness of their potential differential behavior toward students displaying disturbing behavioral characteristics and training teachers to communicate with boys about their disturbing behavior, paired with suggestions for acceptable behavior, should occur. The results of this investigation support the importance of "ecological adaptation learning" suggested by Schlosser and Algozzine (1979).

A second way educators should acknowledge and deal with the apparent sex difference is through curriculum planning. While girls, who are more developmentally advanced in verbal skills, may benefit from academic lessons primarily taught and reinforced through reading and writing, boys may require manipulation and experiential approaches in order to achieve optimally and maintain interest.

In conclusion, we believe educators and researchers must be concerned that boys appear more "at risk" for special education consideration. Further, we suggest that future referral research must include sex differences as an important variable among many factors; it should not be researched in isolation.

Chapter 9

Priority Ranking of Referral Reasons: A Comparison

Of the teachers' stated reasons for referral, learning-related and emotionally-manifested reasons occurred most frequently. Of the 105 students, 85.7% (N=90) were referred for a learning difficulty and 53.3% (N=56) were referred for an emotionally-manifested problem. Therefore, a comparison of students referred primarily for learning or emotional reasons on other factors was of interest to the investigators.

The importance of clarifying the teacher's referral concerns has repeatedly been stressed in the literature (Bergan, 1977; Kratochwill & Bergan, 1978; Tucker, 1981). Bergan (1977) also has emphasized that because teachers refer for multiple reasons, a priority ranking of these reasons is essential for communication and instructional planning about the referred student.

In this chapter, students whose primary referral reason was a learning problem are compared to students whose primary referral reason was a behavioral concern (emotionally-manifested and behavior disorders). Comparisons are made for teachers' attributions, pre-referral classroom interventions, desired student changes, and teachers' desired outcomes for their referral.

Method

Procedure

The teachers were asked to prioritize their reasons for referral according to their importance (i.e., 1 = most important). For this analysis, students referred _primarily_ (i.e., #1 rank) for emotionally-manifested and behavior disorders reasons were combined, resulting in

25 students referred primarily for a behavioral reason. This combination of categories seemed reasonable since most symptoms within the emotionally-manifested category reflected non-aggressive signs of emotional behavior. Since 57 students were identified whose most important referral reason was a learning difficulty, a random selection of 25 students was conducted to equalize the groups.

Coding System

Only the most frequently occurring categories were included in the present analyses. For teachers' attributions, home and student causes were used; for pre-referral interventions, teaching methods, structural changes, help, and behavioral categories were compared, and for desired changes for the student, academic, task management, and behavioral categories were used. To compare the two groups on teachers' desired outcomes, the original categories were collapsed to create two new categories, Special and Regular. Special involved placement, assessment, and decision making outcomes, while Regular involved educational suggestions and both help categories; these new categories reflect whether the primary emphasis for what happens as a result of the referral involves direct service from specialists.

Results

Student Characteristics

Students referred primarily for learning or behavioral reasons were characterized according to sex, age, grade, and teachers' Likert ratings. (See Chapter 2.) As is apparent in Table 20, the two groups of referred students were similar in age, grade, and sex. A 0.5 unit difference in teachers' Likert ratings of the two groups was considered important; students referred primarily for behavioral concerns were rated lower on behavior and being typical of other students in the group, while students referred primarily for learning problems were rated lower on ability to learn and speed of learning.

Insert Table 20 about here

Teachers' Attributions

The frequency and percentage of teachers' attributions for students referred primarily for learning vs. behavioral difficulties appear in Table 21. Large differences appeared in teachers' home and student attributions for the two reasons. Teachers attributed students' learning difficulties to intra-child or student causes (e.g., low ability, self-concept), but students' behavioral difficulties to home causes (e.g., discipline, family instability).

Insert Table 21 about here

Pre-Referral Interventions

Classroom pre-referral interventions for students referred primarily for learning or behavior also appear in Table 21. The teachers in this sample implemented almost twice as many interventions for the behavior group. The percentages of classroom interventions for the behavioral and academic referrals are similar for structural changes, such as peer tutoring or seat changes, and for help interventions, including tutoring and consultation with specialists and parents. Teachers attempted different teaching methods proportionately more often with students referred primarily for learning, and behavioral strategies (e.g., rewards, contracts) proportionately more often for students referred primarily for behavior.

Student Changes

As evident in Table 21, teachers listed more required changes for the students referred primarily for behavioral reasons to fit into grouping structures. Very few teachers required behavioral changes of students referred for learning; proportionately more of the desired changes were behavioral for students referred primarily for behavior. In addition, proportionately more of the required changes for the students referred primarily for learning were improvement in academic areas. Students in both groups were required to make changes reflecting student receptivity for learning (i.e., task management) with approximately the same frequency.

Desired Outcomes

Teachers' desired outcomes for their referrals did not differ as a function of the primary reason for referral (see Table 21). Teachers desired special education involvement about twice as often as general outcomes involving strategies within the "domain" of regular education.

Discussion

This comparison of students (N=50) referred for different primary reasons suggests that the reason itself does not directly relate to teachers' desired outcomes for their referrals; for both learning and behavior referrals, teachers desired assistance from specialists in the form of direct service instruction, testing, or on-going consultation regarding approaches to teach the student. The findings also suggest that teachers discriminate student behavior, as evidenced by the desired student changes and the Likert ratings on student characteristics; they also implement pre-referral interventions that reflect the teacher's primary concern. It appears that the act of being referred, rather than the specific reason of referral, triggers special education placement or placement-related activities; on the other hand, the reason for referral influences other referral factors.

The fact that teachers attempted more pre-referral interventions for students referred primarily for behavior may reflect the strong emphasis given to behavior modification strategies in teacher training programs. It also may indicate that behavioral concerns come to the teachers' attention faster since they interfere with classroom group instruction.

It is interesting that teachers attributed proportionately more of the causes to home factors in students referred primarily for behavioral concerns and to within-student factors in students referred primarily for learning concerns. There are several possible explanations for this difference. It may be that the teachers in this sample were aware of home-related causes for the behavioral group of students and unaware of these factors for the academic group. It may be that these differences actually exist. Or, it may be that teachers perceive their job as "educators" not "disciplinarians"; thus, students displaying behavioral problems in school are viewed as children who have not learned the necessary respect for adults due to instability and/or the lack of such instruction within their home environment.

Finally, there are two explanations for the similar outcomes desired for students referred for different primary reasons. The first explanation involves the free-response format of the survey; the finding of no differences may relate to the multiple referral reasons for these students. Although the students' primary reasons for referral were different, students were referred on the average for three different categories of reasons, and the most frequently occurring combinations involved learning and behavioral concerns. The other explanation involves school districts' interpretation of PL 94-142. If teacher referral means automatic child study, as suggested by teachers' desired outcomes from referral and assessment (see Chapter 6), we would not expect to find a difference in desired outcomes based on different primary reasons for referral.

Chapter 10

Relationships Among Referral Variables

In analyzing the referral process, this survey has addressed a variety of issues that may affect a teacher's decision to refer a student. These issues have been dealt with through the questions regarding reasons for referral, attributions for referral, pre-referral interventions, desired outcomes from referral and assessment, desired changes and ratings of referred student characteristics.

Results presented in previous chapters have been, for the most part, confined to separate analyses of the above questions. That is, each question was treated as if it were an issue independent of the other questions. The results for each question seemed to indicate that each variable carries some weight in determining whether a child is referred. It is important to remember that the task of the teacher is to somehow combine the various forms of input available to her/him (ranging from student behavior to the teachers' feelings about the student) and predict whether the best course of action to take is to initiate referral.

Given that this study collected data on students at the point of referral, we can assume that each teacher decided that referral was the optimal course of action to take for that particular student. Retrospectively, then, it may prove fruitful to attempt to analyze possible relationships among the questions asked on the referral survey. In so doing, a picture of how teachers may combine the information available to them may be obtained.

Method

Procedure

To address the relationship between each open-ended question (reasons, attributions, pre-referral interventions, desired outcomes from referral, desired changes) the responses initially were coded into sets of categories developed for each question. Then categories were coded as present or absent (for a particular survey) and cross-tabulations were performed. Two-by-two contingency tables resulted for each combination of categories across each combination of referral question. A chi square statistic was used to test for significance of relationship.

It is important to note that the open-ended questions originally provided more information than was reflected after being coded as present or absent. The analysis required that much information be lost in the coding process. Therefore, the significance of the various chi square statistics may reflect a conservative estimate of the degree of relationship among referral variable categories.

Results

The significant findings noted below (based on χ^2 analyses) also are presented in summary form in Table 22.

A. If the teachers' reasons for referral included a learning-related reason (85.7% of 105 teachers):

- teachers' use of a behavioral strategy was an unlikely pre-referral intervention ($\underline{p} = .000$)
- most teachers (84.4%) do not indicate that the student must change his/her behavior to fit into the classroom structure ($\underline{p} = .015$).

B. If the teacher's reasons for referral included an emotionally-manifested reason (53.3% of 105 teachers):

- teachers' use of a behavioral strategy was a likely pre-referral intervention (p = .000).
- teachers ascribed either student (p = .037) or home (p = .019) causes for the student's difficulties.
- most teachers (80.4%) do not indicate that student academic changes are necessary for them to fit into the classroom structure (p = .006).
- most teachers (67.9%) indicate that the student must change in task readiness areas in order to fit into the classroom structure (p = .010).

C. If the teachers' reasons for referral included a behavior disorder reason (24.8% of the 105 teachers):

- teachers' use of a behavioral strategy for a pre-referral intervention is likely (p = .000).
- teachers ascribed home causes for the students' difficulties (p = .001).
- nearly half of the teachers indicated that the student must improve his/her behavior in order to fit into the classroom structure (p = .000).

D. If the teachers' reasons for referral included a performance reason such as motivation or task completion (29.5% of the 105 teachers):

- most teachers (83.9%) did not indicate that the student must make an academic change (p = .038), but most (74.2%) did indicate the student must improve in task readiness areas in order to fit into the classroom structure (p = .020).

E. The sex of the referred student was related to several factors:

- there was a significant relationship for boys between an emotionally manifested (p = .002) or behavior disorder (p = .001) referral reason and the teachers' use of behavioral pre-referral interventions.
- there was a significant relationship for boys between an emotionally manifested (p = .024) or behavior disorder (p = .002) referral reason and teachers' citing home as the cause for the boys' school difficulties.

- there was a significant relationship for boys between teachers' implementation of behavioral pre-referral interventions and teachers perceiving the boys' difficulties due to home causes ($p = .002$).
- there was a significant relationship for girls between an emotionally-manifested referral reason and the expectation that the student would improve on task management skills ($p = .009$).

F. Significant relationships among other factors also were found:

- of those teachers using a behavioral pre-referral intervention (41.0%), 70% indicated the student must change in task readiness areas in order to fit into the classroom structure ($p = .022$).

Insert Table 22 about here

As is clear from the above results, the majority of relationships that were significant involved the reasons for referral. Below is a summary of the non-significant findings (based on X^2 analyses):

- There was no relationship between reasons for referral and attributions.
- There was no relationship between reasons for referral and the teachers' desired outcome for the referral.
- There was no relationship between most of the reasons for referral and the pre-referral interventions.
- There was no relationship between most of the pre-referral interventions and teachers' attributions.
- There was no relationship between teachers' attributions and teachers' desired outcomes for the referral.
- There was no relationship between desired student changes and teachers' desired outcome for the referral.
- There was no relationship between desired student changes and teachers' use of pre-referral interventions.
- There was no relationship between students' sex and teachers' attributions.

- There was no relationship between students' sex and teachers' desired outcome for the referral.
- There was no relationship between students' sex and desired student change.

Discussion

Among the referral factors studied, reasons appear to carry a great deal of weight in the teacher's decision to refer a student. However, there was tremendous variability present in the reasons cited by teachers; some were very specific and related to performance, most were broad and oriented to abstract constructs.

The lack of relationships among the rest of the referral question categories may indicate that teachers rarely give them any conscious attention in deciding to refer a student. It may also be explained by the possibility that reasons for referral serve as an umbrella that encompasses the other types of information. Thus attributions, desired outcomes, desired student changes, and interventions are sources of data that combine to help form the reason for referring a child. In the presence of a question regarding reasons, these other variables would not be expected to show relationships among each other but might show relationships with reasons.

The presence of high response variability and the loss of information through coding response categories as present or absent together probably eliminated relationships that were not particularly strong. Reasons for referral appeared to be the single most important variable among those studied in this survey.

Chapter 11

Referral: Implications for Change

Referral is a complicated event that is influenced by student, teacher, and school system characteristics, which in turn are influenced by legal, social, and political issues (Algozzine, Christenson, & Ysseldyke, in press). Prior to addressing implications for change in the referral process, precautionary remarks are warranted.

The survey data presented here were subject to several biases. In this particular study, teachers' reports, particularly for prereferral interventions and desired outcomes, might have been affected by (a) their memory, (b) the desire to appear as if good faith efforts were given to helping children, and (c) the desire to appear knowledgeable to the investigators. The effects of these biases on the results of this study make conclusions about factors influencing referral somewhat tenuous. However, since the data were collected on actual referrals to describe the referral process, this survey can provide the impetus for further research, an important function given the relative scarcity of data on the referral process.

The purpose of this chapter is to stimulate thinking about potential change in current referral practices, changes that are practical at the school district or school level. The authors realize that change is a process not an event; similarly, the readers must realize that an evaluation of existing district procedures relative to the findings of this survey will require experimentation of alternative procedures. The authors acknowledge that the ideas presented in this chapter necessitate empirical study.

On the basis of this survey, six implications for educators' and researchers' further consideration are suggested. First, reasons for referral must be clearly delineated and specified. General and subjective reasons (e.g., "poor attitude") must not be accepted by child study teams as representing the need for a student to be given a psychoeducational evaluation. Specificity of referral reason is essential to plan the appropriate assessment and intervention strategies. Description of student behavior, as well as the teachers' knowledge about, attitudes toward, and tolerance for the characteristics and behaviors represented in the referral reasons is necessary and important information.

Second, teachers appear to be very good at rating characteristics of students. Preservice and inservice training must emphasize more than characteristics of specific "kinds" of students. In fact, this emphasis in isolation may be perpetuating a "search for pathology" (Sarason & Doris, 1979). The interaction between the student and educational setting must be characterized. Therefore, training must be provided in the rating of classroom ecology variables (cf. Greenwood, Delquadri, & Hall, 1978).

Third, teachers ascribed one or two causes for the students' difficulties; seldom did the causes relate to the teachers' role. Since individual behavior is complex, identification of single causes may be very inaccurate and/or incomplete. Linear thinking (e.g., there is a cause and a solution) appeared to pervade this sample; little evidence was found for the occurrence of systems thinking (e.g., the inter-relationship of all parts) within an ecological perspective (e.g., behavior has meaning only within the relationship in which it is embedded). Teachers must be trained to adopt the latter approach. Without an ecological perspective, teachers may continue to suffer from "teaching helplessness"; that is, their efforts may seem unimportant because they cannot influence a student whose difficulties are attributed to one stable, internal cause (e.g., student's ability). Child study teams must address the behavior of the student; educators can then plan interventions to alter the behavior.

Fourth, teachers deserve credit for attempting interventions prior to seeking additional services for students. However, the data suggest the implementation of pre-referral interventions are unsystematic and lacking in accountability. These data suggest a challenge for child study teams to collaborate with regular educators so that pre-referral interventions utilize systematic principles of learning (e.g., practice, appropriate level of material) and meet accountability standards. Such procedures should provide a data base for future assessment decisions while concurrently assisting the classroom teacher. The role of child study team members as behavior consultants (Bergan, 1977) rather than exclusively as diagnosticians is apparent.

Fifth, teachers preferred placement or placement-related activities as a desired outcome from their referrals. This preference suggests a need for an attitude change regarding referral outcomes. While the emphasis on placement could be related to the lack of student change as a result of the teachers' pre-referral intervention efforts, it also could relate to PL 94-142 district procedures. Teachers' desired outcomes for assessment were highly similar to those for referral, suggesting "blurred boundaries" between referral and assessment. Again, it appears that teachers have been taught to comply with PL 94-142 by looking for specific student characteristics to justify referrals, and that referral means automatic assessment of the student by child study members. Thus, teachers have learned that intervention "is" special education placement. In a study addressing factors that inhibit or facilitate regular class teachers' decision to refer, teachers identified limited classroom interventions as a frequently occurring constraint (Christenson et al., 1982). Mainstreaming is a reality for handicapped children; in fact, mildly handicapped students spend a higher proportion of their school day in the mainstream classroom than in the resource rooms. Child study teams must provide accountable instructional strategies for any teacher referral; many of these referrals may be handled without formal diagnostic testing.

Sixth, teachers in this sample appeared to have greater tolerance for students' academic skill level than for students' lack of preparation for or poor attitude toward instruction. Over half of the desired changes for students represented improvement in student receptivity (e.g., motivation, willingness to try). The high percentage suggests a need to explain and reinforce teachers' expectations for the students' role in the learning process to students and parents. It also suggests needs for preservice and inservice training on how to change student behavior. Too often change in behavior is demanded and expected to change immediately (an event); in reality, change in students is a process and teachers should be utilizing child study team members as consultants in this process. These results also speak to the importance of assessing teacher tolerance for specific student characteristics when mainstreaming students.

In summary, the authors suggest that the results from this survey indicate that we, as educators, may have "lost sight of the real reason for referral," that of instructional planning. It appears that teachers desire placement, and that intervention has been misinterpreted as placement. Special education placement is only one type of intervention and it is not the sole solution to the classroom teacher's concern. Therefore, rather than operating in a referral-to-placement paradigm, school systems must discuss and implement referral-to-intervention paradigms. This systems change would not preclude assessment entirely, although it should reduce the number of assessments for cases in which the teacher's concern could be solved within the classroom through behavioral consultation.

The authors realize that the effects of these implications for change are yet to be empirically documented. Factors influencing a classroom teacher's decision to refer a student for psychoeducational evaluation are complex. The open-ended question format selected by the authors for this descriptive study restricted an analysis involving all factors of interest. Consequently, suggestions for future research include:

(1) Data should be based on actual students at the point of referral.

(2) Representative, stratified samples of referred students should be used.

(3) Checklist questionnaires based on the response categories used in this survey would enable more powerful statistical analyses to be conducted.

(4) Collection of additional information on teacher and school system characteristics, as well as information on student characteristics may allow a comparison of the contribution of these components to the initiation of the referral. Data could be analyzed through a multiple regression model.

(5) Follow-up studies on student referrals to assess the predictive validity of the questionnaires should be conducted.

The validation of the components leading to referral as outlined above would be an extensive project. Such an effort would enable pre-referral consultation, intervention, and assessment to proceed from a more solid data base. Accuracy in decision-making practices regarding special education placements and increased use of effective teaching practices within the mainstream classroom can be simultaneous goals.

References

Algozzine, B. The emotionally disturbed child: Disturbed or disturbing? Journal of Abnormal Child Psychology, 1977, 5, 205-211.

Algozzine, B., Christenson, S., & Ysseldyke, J. Probabilities associated with the referral-to-placement process. Teacher Education and Special Education, in press.

Algozzine, B., Schmid, R., & Mercer, C. D. Childhood behavior disorders: Applied research and educational practice. Rockville, MD: Aspen, 1981.

Algozzine, B., Ysseldyke, J., & Christenson, S. An analysis of the rate of referral for and placement in special education classes. Journal of Special Education, in press.

Alper, T. G., & White, O. R. The behavioral description referral form: A tool for the school psychologist in the elementary school. Journal of School Psychology, 1971, 92, 177-181.

Bagnato, S. J. The efficacy of diagnostic reports as individualized guides to prescriptive goal planning. Exceptional Children, 1980, 46, 554-557.

Bagnato, S. J., & Neisworth, J. T. The intervention efficiency index: An approach to preschool program accountability. Exceptional Children, 1980, 46(4), 249-254.

Bar-Tal, D. Attributional analysis of achievement related behavior. Review of Educational Research, 1978, 48(2), 259-271.

Bar-Tal, D., & Darom, E. Causal perceptions of pupils' success or failure by teachers and pupils: A comparison. Unpublished manuscript. University of Tel-Aviv, Israel, 1977.

Batsche, G. Referral-oriented consultative model of assessment systems and report writing. Paper presented at the annual meeting of the National Association of School Psychologists, Houston, 1981.

Beckman, L. J. Causal attributions of teachers and parents regarding children's performance. Psychology in the Schools, 1976, 13, 213-218.

Bergan, J. R. Behavioral consultation. Columbus, OH: Charles E. Merrill, 1977.

Brophy, J. E., & Good, T. L. Teachers' communication of differential expectations for children's classroom performance. Journal of Educational Psychology, 1970, 61(5), 365-374.

Brophy, J. E., & Good, T. L. *Teacher-student relationships. Causes and consequences*. New York: Holt, Rinehart, & Winston, 1974.

Caplan, P. J., & Kinsbourne, M. Sex differences in response to school failure. *Journal of Learning Disabilities*, 1974, *1*, 232-235.

Chapman, J. W., & Boersma, F. J. Learning disabilities, locus of control, and mother attitudes. *Journal of Educational Psychology*, 1979, *71*, 250-258.

Christenson, S., Ysseldyke, J., & Algozzine, B. Institutional constraints and external pressures influencing referral decisions. *Psychology in the Schools*, 1982, *19*, 341-345.

Cooper, H. M., & Burger, J. M. Internality, stability, and personal efficacy: A categorization of free response academic attributions. Unpublished manuscript. University of Missouri, Columbia, 1978.

Crandall, V. J., Katkovsky, W., & Preston, A. Motivational and ability determinants of young children's intellectual achievement behaviors. *Child Development*, 1962, *33*, 643-651.

Curtis, R. C., & Schildhaus, J. Children's attributions to self and situation. *Journal of Social Psychology*, 1980, *110*, 109-114.

Davis, W. E. A comparison of teacher referral and pupil self-referral measures relative to perceived school adjustment. *Psychology in the Schools*, 1978, *15*, 22-26.

Deshler, D., Schumaker, J. B., Alley, G. B., Warner, M., & Clark, F. L. *An epidemiological study of learning disabled adolescents in secondary schools: Social status, peer relationships, activities in and out of school, and time use* (Research Report No. 18). Lawrence: University of Kansas, Institute for Research in Learning Disabilities, 1980.

Dusek, J. B. Do teachers bias children's learning? *Review of Educational Research*, 1975, *45*(4), 661-684.

Dweck, C. S. The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology*, 1975, *31*, 674-685.

Frieze, I. H. Causal attributions and information seeking to explain success and failure. *Journal of Research in Personality*, 1976, *10*, 293-305.

Frieze, I. H., & Snyder, H. N. Children's beliefs about the causes of success and failure in school settings. *Journal of Educational Psychology*, 1980, *72*, 186-196.

Gilbert, G. M. A survey of referral problems in metropolitan child guidance centers. Journal of Clinical Psychology, 1957, 13, 38-41.

Good, T. L., & Dembo, M. Teacher expectations: Self-report data. School Review, 1973, 81, 247-253.

Goodlad, J., & Klein, M. F. Looking behind the classroom door. Worthington, OH: Charles A. Jones, 1974.

Greenwood, C. R., Delquadri, J., & Hall, R. V. Code for instructional structure and student academic response: CISSAR. Kansas City, KS: Juniper Gardens Children's Project, Bureau of Child Research, University of Kansas, 1978.

Gregory, M. K. Sex bias in referrals. Journal of School Psychology, 1977, 15, 5-8.

Hiltbrunner, C. L., & Vasa, S. F. Watch the children: Precision referring. Academic Therapy, Winter 1974-75, 167-172.

Johnson, D. W., & Johnson, R. T. Learning together and alone: Cooperation, competition, and individualization. Englewood Cliffs, NJ: Prentice-Hall, 1975.

Jones, E. E., & Nisbett, R. E. The actor and the observer: Divergent perceptions of the causes of behavior. In E. E. Jones, D. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), Attribution: Perceiving the causes of behavior. Morristown, NJ: General Learning Press, 1971.

Kelley, H. H. Attribution in social interaction. In E. E. Jones, D. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), Attribution: Perceiving the causes of behavior. Morristown, NJ: General Learning Press, 1971.

Keogh, B., Major-Kingsley, S., Omori-Gordon, L., & Reid, P. Summary Report. UCLA Marker Variables Project, Unpublished manuscript, 1980.

Kornblau, B. W., & Keogh, B. K. Teachers' perceptions and educational decisions. New Directions for Exceptional Children, 1980, 1, 87-101.

Kratochwill, T. W., & Bergan, J. R. Evaluating programs in applied settings through behavioral consultation. Journal of School Psychology, 1978, 16, 375-383.

Lietz, J. J., & Gregory, M. K. Pupil race and sex determinants of office and exceptional educational referrals. Educational Research Quarterly, 1978, 32, 61-66.

Maddox-McGinty, A. M. Children's nonverbal behavior in the classroom and teachers' perceptions of teachability: An observational study. Unpublished doctoral dissertation, University of California, Los Angeles, 1972.

McCarthy, J., & Paraskevopoulos, J. Behavior patterns of learning disabled, emotionally disturbed, and average children. Exceptional Children, 1969, 36, 69-74.

Medway, F. J. Causal attributions for school-related problems: Teacher perceptions and teacher feedback. Journal of Educational Psychology, 1979, 71, 809-816.

Meyers, J., Parsons, R., & Martin, R. Mental health consultation in the schools. San Francisco: Jossey-Bass, 1979.

Mirkin, P., Marston, D., & Deno, S. Direct and repeated measurement of academic skills: An alternative to traditional screening, referral, and identification of learning disabled students (Research Report No. 75). Minneapolis: University of Minnesota, Institute for Research on Learning Disabilities, 1982.

National Education Association. Teacher opinion poll. Today's Education, 1979, 68, 10.

Nicholls, J. G. Development of perception of own attainment and causal attributions for success and failure in reading. Journal of Educational Psychology, 1979, 71, 94-99.

Nicholson, C. A. A survey of referral problems in 59 Ohio school districts. Journal of School Psychology, 1967, 4(4), 280-286.

Pearl, R. A. Learning disabled children's attributions for success and failure: A replication with a labeled LD sample (Research Report). Chicago Circle: University of Illinois, Institute for Research on Learning Disabilities, 1980.

Pearl, R. A., & Bryan, T. Mothers' attributions for their learning disabled child's successes and failures (Research Report). Chicago Circle: University of Illinois, Institute for Research on Learning Disabilities, 1980.

Pearl, R., Bryan, T., & Donahue, M. Learning disabled children's attributions for success and failure. Learning Disability Quarterly, 1980, 3, 3-9.

Poland, S. F., Ysseldyke, J. E., Thurlow, M. L., & Mirkin, P. K. Current assessment and decision-making practices in school settings as reported by directors of special education (Research Report No. 14). Minneapolis: University of Minnesota, Institute for Research on Learning Disabilities, 1979. (ERIC Document Reproduction Service No. ED 185 758).

Reinert, H. Children in conflict. St. Louis: Mosby Co., 1976.

Reynolds, M. New perspectives on the instructional cascade. In A. M. Rehmann & T. F. Riggen (Eds.), Leadership in special education series: The least restrictive alternative (Vol. 7). Minneapolis: Minneapolis Public Schools, 1977.

Rhodes, W. C. A community participation analysis of emotional disturbance. Exceptional Children, 1970, 36, 309-314.

Rice, J. P. Types of problems referred to a central guidance agency at different grade levels. Personnel and Guidance Journal, 1963, 32, 52-55.

Richey, H. W., & Richey, M. H. Attribution in the classroom: How just is the just world? Psychology in the Schools, 1978, 15, 216-222.

Rist, R. Student social class and teacher expectations: The self-fulfilling prophecy in ghetto education. Harvard Educational Review, 1970, 40, 411-450.

Robbins, R. C., Mercer, J. R., & Meyers, C. E. The school as a selecting-labeling system. Journal of School Psychology, 1967, 5(4), 270-279.

Rubin, R., & Balow, B. Learning and behavior problems: A longitudinal study. Exceptional Children, 1971, 38, 293-299.

Salvia, J., & Ysseldyke, J. E. Assessment in special and remedial education (2nd ed.). Boston: Houghton Mifflin, 1981.

Samuels, S. J. Characteristics of exemplary reading programs. In J. Guthrie (Ed.), Comprehension and teaching: Reviews of research. Newark, DE: International Reading Association, 1981.

Sarason, S., & Doris, J. Educational handicap, public policy, and social history. New York: The Free Press, 1979.

Schlosser, L., & Algozzine, B. The disturbing child: He or she? Alberta Journal of Educational Research, 1979, 25(1), 30-36.

Shavelson, R. J., & Borko, H. Research on teachers' decisions in planning instruction. Research on Teaching, 1979, 57(4), 183-189.

Shepard, L. A., & Smith, M. L. The identification, assessment, placement, and remediation of perceptual and communicative disordered children in Colorado. Boulder, CO: Laboratory of Educational Research, University of Colorado, 1981.

Shinn, M. R., & Ysseldyke, J. E., Deno, S., & Tindal, G. A comparison of psychometric and functional differences between students labeled learning disabled and low achieving (Research Report No. 71). Minneapolis: University of Minnesota, Institute for Research on Learning Disabilities, 1982.

Silberman, M. L. Behavioral expression of teachers' attitudes toward elementary school students. Journal of Educational Psychology, 1969, 60(5), 402-407.

Swap, S. M. Disturbing classroom behaviors: A developmental and ecological view. Exceptional Children, 1974, 41, 163-172.

Thelen, H. A. Classroom grouping for teachability. New York: Wiley, 1967.

Thurlow, M. L., & Ysseldyke, J. E. Current assessment and decision-making practices in model programs for the learning disabled (Research Report No. 11). Minneapolis: University of Minnesota, Institute for Research on Learning Disabilities, 1979. (ERIC Document Reproduction Service No. ED 185 755).

Thurlow, M. L., & Ysseldyke, J. E. Teachers' beliefs about LD students (Research Report No. 66). Minneapolis: University of Minnesota, Institute for Research on Learning Disabilities, 1982.

Tollefson, N., Tracy, D. B., Johnsen, E. P., Borgers, S., Buenning, M., Farmer, A., & Barke, C. An application of attribution theory to developing self-esteem in LD adolescents (Research Report No. 23). Lawrence: University of Kansas, Institute for Research in Learning Disabilities, 1980.

Tucker, J. A. Stages in the appraisal process. Minneapolis: National School Psychology Inservice Training Network. University of Minnesota, 1981.

Walsh, M. E., Felicisima, C., & Scrafica, R. B. Referral of the child with learning problems: Bridging a communication gap. Psychology in the Schools, 1976, 13, 50-57.

Weiner, B. An attributional approach for educational psychology. Review of Research in Education, 1976, 4, 179-197.

Weiner, B., & Kukla, A. An attributional analysis of achievement motivation. Journal of Personality and Social Psychology, 1970, 15, 1-20.

Werry, J., & Quay, H. The prevalence of behavioral symptoms in younger elementary school children. American Journal of Orthopsychiatry, 1971, 41, 136-143.

Willis, S. Formation of teachers' expectations of students' academic performance. Unpublished doctoral dissertation, University of Texas, Austin, 1972.

Ysseldyke, J. E. A critical analysis of public school psychoeducational referral forms Unpublished master's thesis. University of Illinois, 1968.

Ysseldyke, J., & Algozzine, B. Critical issues in special and remedial education. Boston: Houghton-Mifflin, 1982.

Ysseldyke, J. E., Algozzine, B., Regan, R. R., Potter, M., Richey, L., & Thurlow, M. Psychoeducational assessment and decision making: A computer-simulated investigation (Research Report No. 32). Minneapolis: University of Minnesota, Institute for Research on Learning Disabilities, 1980. (ERIC Document Reproduction Service No. ED 203 607).

Ysseldyke, J. E., Algozzine, B., Richey, L., & Graden, J. Declaring students eligible for learning disability services: Why bother with the data? Learning Disability Quarterly, 1982, 5, 37-44.

Ysseldyke, J., & Regan, R. Nondiscriminatory assessment: A formative model. Exceptional Children, 1980, 46(6), 465-466.

Table 1

Characteristics of Referred Students

Characteristic	n	%
Student Sex		
Male	73	69.5
Female	30	28.6
Unidentified	2	1.9
	105	100.0
Grade		
Kindergarten	15	14.3
First	19	18.1
Second	20	19.0
Third	17	16.2
Fourth	9	8.6
Fifth	16	15.2
Sixth	7	6.7
Unidentified	2	1.9
	105	100.0
Age		
5	9	8.6
6	13	12.4
7	16	15.2
8	19	18.1
9	14	13.3
10	8	7.6
11	13	12.4
12	2	1.9
13	2	1.9
	105	100.0

Table 2

Classroom Teachers' Referral Reasons[a]

Reasons	n	%
Student Reasons		
Learning-Related (academic failure, memory problems, specific learning deficits)	170	39.9
Emotionally-Manifested (poor social/school adjustment, self-concept, immaturity, hostility)	93	21.8
Attention-Related (short attention span, concentration, impulsivity)	47	11.0
Performance Variables (organizational or motivational difficulties)	36	8.5
Behavior Disorders (inappropriate classroom behaviors, management difficulties, disruption)	30	7.0
Perceptual-motor/Sensori-motor (gross and fine motor coordination, visual-motor problems)	25	5.9
Language (speech delay, receptive and expressive difficulties)	11	2.6
Activity Disorders (hyperactivity, hypoactivity)	6	1.4
Physical Development (physically immature, developmentally delayed)	2	0.5
Environmental Reasons		
School (inappropriate classroom placement)	5	1.1
Home (parents want him/her tested)	1	0.3
	426	100.0

---

[a] Examples within referral categories are in parentheses.

Table 3

Percentages of Symptoms within the Learning-Related

and Emotionally-Manifested Categories

Learning-Related	n	%	Emotionally-Manifested	n	%
Specific learning deficits[a]	81	47.6	Poor social, school adjustment/ immature moral development	19	20.4
School failure/achieving below grade level	29	17.1	Self-Concept/confidence	14	15.0
Memory	11	6.5	Immature	11	11.8
Inability to follow directions	11	6.5	Withdrawn/shy-timid	9	9.7
Not learning	9	5.3	Aggression	6	6.5
Poor quality work	7	4.1	Emotional problems	5	5.4
Low rate of on-task behavior	6	3.5	Temper tantrums	4	4.3
Poor work habits	6	3.5	Sexually inappropriate	4	4.3
Uneven mental functioning	4	2.4	Reduced, inappropriate effect crying	3	3.2
No independent work	3	1.8	Delinquent Behavior	3	3.2
Inability to complete work	2	1.2	Minimal compliance, cooperation	3	3.2
Difficulty with abstractions/ acaculia	1	0.5	Angry/bitter/hostile	3	3.2
Total Learning-Related Reasons	170	100.0	Antisocial	2	2.2
			Out of control	2	2.2
			Hyperactive	2	2.2
			Disoriented	2	2.2
			Frustration	1	1.0
			Total Emotionally-Manifested Reasons	93	100.0

[a] Specific learning deficits include academic areas.

Table 4

Percentage of Students Referred for Different Reasons[a]

Reason	n	%
Learning-Related	90	85.7
Emotionally-Manifested	56	53.3
Attention-Related	37	35.2
Performance Variables	31	29.5
Behavior Disorders	26	24.8
Perceptual-motor/Sensori-motor	19	19.1
Activity Disorders	11	10.5
Language	6	5.7
Physical Development	2	1.9
Miscellaneous	5	4.8

[a] Percentages would not total 100 because multiple responses occurred frequently.

Table 5

Frequencies of Single and Multiple Categories of Teachers' Referral Reasons

No. Referral Categories	No. Students	%
1	10	9.5
2	32	30.5
3	43	41.0
4	15	14.3
5	5	4.7
	105	100.0

Table 6

Rank Order of Reasons for Referral[a]

Reason for Referral	Rank 1	Rank 2[b]
Learning-Related	57	36
Emotionally-Manifested	19	20
Behavior Disorder	6	6
Attention-Related	5	10
Performance Variables	4	10
Language	2	6
Perceptual-motor/Sensori-motor	1	4
Activity Disorders	1	0
Physical Development	0	1
Miscellaneous	2	1

[a] Entries in the table are the frequency with which the reason was ranked first or second.

[b] Three teachers gave only one reason.

Table 7

Teachers' Attributions for Referred Students

Cause	IRLD n	IRLD %	NEA %
Student	80	53.7	14.0
Home	53	35.6	81.0
Label	12	8.0	*
Teacher	3	2.0	1.0
School	1	0.7	4.0
	149	100.0	100.0

*The label category was not included in the NEA survey.

Table 8

Percentages of the Symptoms for Teachers' Attributions to Student and Home

Student Causes	n	%	Home Causes	n	%
Birth defects/medical-related	17	21.3	Home environment	19	35.8
Ability/low academic potential	14	17.5	Lacks family stability (divorce, moves)	13	24.5
Psychological process deficits	11	13.8	Educational stimulation/ interest	10	18.9
Learning problem/low academic performance	11	13.7	Parental management (discipline, supervision)	5	9.4
Maturational delay	11	13.7	Poor nutrition, diet	3	5.7
Behavioral/self-concept	9	11.2	Parental expectations	3	5.7
Emotional-based	7	8.8			
	80	100.0		53	100.0

Table 9

Classification of Within-Student Causes[a]

Cause	n	%
Ability	52	56.5
Effort	32	34.8
Task Difficulty	3	3.3
Luck	0	0.0
No Code	5	5.4
	92	100.0

[a] Entries are frequencies and percentages based on cases originally coded as a student or label cause.

Table 10

Percentages for Attributions of Referred Students[a]

Cause	n	%
Within-Student	60	63.8
Home	46	48.9
Teacher	3	3.2
School	1	1.1
None	11	10.5

[a] Percentages would not total 100 because multiple responses occurred for the 94 students for which attributions were ascribed.

Table 11

Pre-Referral Interventions Identified by Classroom Teachers

Pre-Referral Interventions	Description	n	%
Methods	techniques or methods used to teach an academic lesson or affect behavior. Includes attention, small groups, curriculum changes, repetition of directions, prompts.	96	29.3
Behavioral	specifically defined approach to change identified behavior using positive or negative reinforcers.	72	22.0
Structural Change	changes in the amount of structure provided for the student. Includes seat change, carrel, peer tutor, work with aide.	57	17.4
Specialized Help	student receives additional specialized assistance including speech therapy, resource room, Title I, or counseling.	49	14.9
Informational	teacher requested additional information regarding student. Includes referral to child study team, diagnostic evaluation, conference with parents or other specialists.	35	10.7
Materials	Specifically identified materials. Includes tapes, A-V materials, manipulative, brand name or other specification necessary.	17	5.2
Miscellaneous		2	0.5
		328	100.0

Table 12

Percentages of Pre-Referral Interventions Classified Within the Methods Category

Methods	N	% of Method Interventions	% of Total Interventions
Individual Attention	24	25.0	7.1
Curriculum Adjustment	19	19.8	5.7
Orientation to Task	18	18.8	5.4
Small Group Placement	12	12.5	3.6
Affective Responses	14	14.6	4.2
Additional Tasks	9	9.4	2.7
	96	100.0	28.7

Table 13

Frequency and Percent Occurrence of Categories of Pre-Referral Interventions

Number in Combination	Frequency	Percent
2	38	36.2
3	33	31.4
1	26	24.8
4	5	4.8
0	2	2.0
5	1	1.0
	105	100.0

Table 14

Teachers' Desired Outcomes from Referral

Outcome Category		N	%
Placement	teacher clearly wants student to be placed in special services	39	30.0
Assessment	teacher clearly wants student to be tested	24	18.5
Decision Making	teacher wants to receive information as a result of referring the student that would help in making instructional or placement decisions about the student's educational program	23	17.7
Educational Suggestions	teacher wants to receive suggestions regarding how to teach the referred student; special education placement not mentioned	15	11.5
Student Behavior Change	teacher wants the referral to result in the student changing his behavior; no mention of teacher's role	12	9.2
Help-in-School	teacher wants student to receive help in school that was of a very general nature	9	6.9
Help-out-of-School	teacher wants referral to result in student receiving some type of help outside of school	8	6.2
		130	100.0

Table 15

Teachers' Desired Outcomes from Assessment

Outcome Category	N	%
Placement	47	39.5
Educational Suggestions	25	21.0
Decision Making	23	19.3
Student Behavior Change	9	7.6
Help-in-School	8	6.8
Help-out-School	6	5.0
Assessment	1	0.8
	119	100.0

Table 16

Significance of Relationships Between Student Characteristics and Desired Outcomes for Referral

Student Characteristics	Placement	Assessment	Decision Making	Ed. Sugg.
Functioning in Group	.026*	.009*	.043*	.967
Typical of Students	.181	.015*	.012*	.351
Ability to Learn	.406	.921	.197	.214
Speed of Learning	.144	.592	.421	.360
Motivation	.133	.534	.004*	.111
Behavior	.206	.213	.004*	.667
Maturity	.457	.318	.015*	.954
Judgment	.965	.924	.054	.660

*Denotes significant relationships.

Table 17

Teachers' Desired Changes for Referred Students[a]

Desired Change	n	%
Task Readiness (complete work, attend, follow directions)	89	52.0
Academic (overcome learning problem, improve academic skills)	43	25.2
Behavioral (reduce inappropriate behavior and temper tantrums)	25	14.6
Program (receive tutorial or special education services)	12	7.0
Miscellaneous	2	1.2
	171	100.0

[a] Examples of desired change categories are in parentheses.

Table 18

Percentage of Students for Varied Desired Changes[a]

Type of Change	n	%
Task Readiness	58	60.4
Academic	34	35.4
Behavior	21	21.9
Extra Service	8	8.3
No Change Indicated	9	8.6

[a] Percentages would not total 100 because multiple responses occurred for the 96 students for which changes were indicated.

Table 19

Percentages of Referral Factors by Sex[a]

Referral Factor	Male		Female	
	n	%[b]	n	%[b]
Reasons for Referral				
Learning Related	111	.68	53	.32
Emotionally Manifested	59	.64	33	.36
Attention Related	35	.78	10	.22
Behavior Disorders	27	.90	3	.10
Performance	24	.67	12	.33
Perceptual-Motor	21	.84	4	.16
Language	10	.91	1	.09
Activity	4	.67	2	.33
Physical Development	0	--	2	1.00
Attributions				
Student [c]	63	.70	27	.30
Home	37	.70	16	.30
Teacher	3	1.00	0	--
School System	1	1.00	0	--
Pre-referral Interventions				
Methods	65	.71	27	.29
Behavioral	60	.83	12	.17
Structural	36	.63	21	.37
Help	33	.67	16	.33
Information	27	.80	7	.20
Materials	13	.76	4	.24
Desired Outcomes				
Placement	31	.82	7	.18
Assessment	17	.71	7	.29
Decision Making	16	.80	7	.20
Educational Suggestions	12	.80	3	.20
Student Behavior Change	8	.70	4	.30
Help-out-School	8	1.00	--	
Help-in-School	5	.56	4	.44

Table 19 (continued)

Referral Factor	Male n	Male %	Female n	Female %
Desired Changes for Student				
Task Readiness	67	.76	21	.24
Academic	28	.67	14	.33
Behavior	19	.76	6	.24
Extra Service	11	.92	1	.08

[a] Data are provided for referred students whose sex was identified (N=103).

[b] Percentages represent proportion of girls and boys within each category.

[c] Student category includes student and label attributions (i.e., within-student category).

Table 20

Characteristics of Students Referred for Different Primary Reasons

	Learning-Related		Behavioral	
Characteristic	%	$\overline{X}$	%	$\overline{X}$
Sex (% boys)	75.0		72.0	
Age		8.7		8.1
Grade				
Kgn - 3rd	.65	2.9	.60	2.6
4th - 6th	.35		.40	
Teachers' Ratings[a]				
functioning within group		3.5		3.8
behavior typical of group		3.8		4.5
ability to learn		3.8		3.0
speed of learning		4.0		3.4
motivation		3.7		3.8
behavior		2.9		4.0
maturity		3.5		3.9
judgment		3.6		4.0

[a] Ratings were on a scale from 1 to 5, where 1=very good, 3=average, and 5=very poor.

Table 21

Comparison of Students Referred for Different Primary Reasons

	Primary Reason			
	Learning-Related		Behavioral	
Factor	n	%	n	%
Attributions				
Student	17	.68	12	.34
Home	8	.32	23	.66
Pre-Referral Interventions				
Methods	18	.44	20	.25
Structural	8	.20	15	.19
Help	8	.20	11	.14
Behavioral	7	.17	33	.42
Student Changes				
Task Management	16	.57	22	.48
Academic	10	.36	7	.15
Behavior	2	.07	17	.37
Desired Outcomes				
Special	17	.77	17	.65
Regular	5	.23	9	.35

Table 22

Significant Relationships Among Referral Variables*

		Reasons					Causes		Interventions					Desired Outcomes				Changes			
		L	E	A	P	B	S	H	M	B	S	SH	I	P	A	DM	ES	TR	A	B	P
Reasons	Learning									-								-		-	
	Emotional						+	+		+								+	-		
	Attention																				
	Performance																	+	-		
	Behavior							+		+										+	
Cause	Student																				
	Home		B+			B+															
Interventions	Methods																				
	Behavioral		B+			B+		B+										+			
	Structure																				
	Special Help																				
	Information																				
Outcomes	Placement																				
	Assessment																				
	Decision Making																				
	Educ.Suggestions																				
Changes	Task Readiness		G+																		
	Academic																				
	Behavior																				
	Program																				

*χ^2, $p < .05$

+ = positive association

- = negative association

Above diagonal analyses for all referrals
Below diagonal for sex differences,
B=Boys, G=Girls

Information on Referred Student

Age____ Grade____ Sex ____

School Information

State in which located____________________

Circle one: Rural Urban Suburban

Teacher Information

Years teaching experience __________

Sex____

REFERRAL SURVEY

The Referral Survey is designed to obtain current information on students referred for assessment and services. All information you provide will be confidential and will be reported in a group summary only. Please complete the questions below for the student you have referred. There are no "right" or "wrong" answers. If additional space is needed, attach another sheet of paper.

1. Specify the major problems for which you are referring this student.

   a.

   b.

   c.

   d.

   e.

2. Rank order the above problems as to their importance. Put 1 next to the most important reason for referral, 2 next to the second most important, etc.

3. What do you believe is the cause(s) of this student's problem(s)?

4. List the things (if any) that have been tried in the classroom prior to referral to attempt to remedy these problems. Include the time period each was tried (days, weeks, months) and put an * by any intervention that was a direct result of a staff conference about the student.

5. What do you want to happen as a result of your referral of this student?

6. If the student is assessed, what do you want to happen as a result of the assessment?

OVER

7. How are students grouped for reading in your class and/or grade? (Example: We have four reading groups between the two third grade teachers; I have the two lower groups) (Example: There is one reading group since students are not divided into smaller groups in the sixth grade) (Example: Upper students in my second-grade class meet with one third-grade class)

8. Within which group(s) is the referred student? (Example: He/she is in the second highest reading group)

9. For the following statements, rate the referred student in comparison to the other students in his/her reading group by indicating whether you Strongly Agree (SA), Agree (A), Don't Know (DK), Disagree (D), or Strongly Disagree (SD). Circle one response on each line.

a. He/She functions well within the group.	SA	A	DK	D	SD
b. He/She is typical of students in the group.	SA	A	DK	D	SD

10. For the following statements, rate how the referred student functions relative to others in his/her reading group by indicating Very Good (VG), Good (G), Average (A), Poor (P), or Very Poor (VP). Circle one response on each line.

a. Ability to learn	VG	G	A	P	VP
b. Speed of learning	VG	G	A	P	VP
c. Motivation	VG	G	A	P	VP
d. Behavior	VG	G	A	P	VP
e. Maturity	VG	G	A	P	VP
f. Judgment	VG	G	A	P	VP

11. In your judgment, how would the student have to change to fit into your class or the grouping structure?

12. Please answer the following questions (based on your best recollection)

a. For the last three years, how many students in your class have had sufficient learning and/or behavior problems that it was necessary to refer them for an evaluation?

1977-78____________ 1978-79____________ 1979-80____________

b. How many referred students were actually evaluated?

1977-78____________ 1978-79____________ 1979-80____________

c. How many were provided with special education services?

1977-78____________ 1978-79____________ 1979-80____________

d. How many students were in your class?

1977-78____________ 1978-79____________ 1979-80____________

13. To whom have you spoken about this referral? List title(s) of individuals.

X-10/80
Form 1

College of Education

UNIVERSITY OF MINNESOTA
TWIN CITIES

Department of Psychoeducational Studies
249 Burton Hall
178 Pillsbury Drive S.E.
Minneapolis, Minnesota 55455
(612) 373-3483

Dear Teacher,

The University of Minnesota's Department of Psychoeducational Studies is conducting a national survey to obtain current information on students referred for assessment and services. Your school district has agreed to participate. We would like you to assist us by completing the enclosed survey.

We are asking that a specific procedure be followed. After you refer a student, please complete the enclosed survey; then, mail it directly to us in the provided envelope. All responses to the survey will be anonymous. Your consent to participate in this study is implied when you return the survey. Your participation is voluntary.

As a research assistant, I am responsible for data collection. If I may answer any questions or be of any assistance to you, please contact me at the above address or call me collect at 612-376-2666.

Thank you for your participation. We look forward to sharing the results of this national survey with your school district.

With best regards,

Sandy Christenson

Sandy Christenson
Research Assistant

SC:mh

Enclosure

Appendix C

Description of Research Coding System

I. REASONS FOR REFERRAL

A. Emotionally Manifested Symptoms

1. Sleep disorders/Bedwetting
2. Emotional lability/Irritability
3. Temper tantrums
4. Explosiveness
5. Depression
6. Excitement
7. Antisocial
8. Frustration
9. Aggression
10. Emotional problems
11. Out of control
12. Reduced, inappropriate affect/Crying
13. Delinquent behavior
14. Minimal compliance, cooperation
15. Poor social, school adjustment/Immature moral development
16. Jealous
17. Angry/Bitter/Hostile/Belligerent
18. Withdrawn/Shy/Timid/Passive
19. Immature
20. Hyporeactive
21. Hyperreactive
22. Disoriented

B. Behavior Disorders

1. Disruptive
2. Talkative/Loud
3. Classroom management problems
4. Behavior problems

C. Learning Related Symptoms

1. Specific learning deficits/Learning difficulty
2. School failure/Achieving below grade
3. Difficulty with abstractions/Acaculia
4. Memory
5. Inability to complete work
6. Inability to follow directions
7. Uneven mental functioning
8. Low rate of on-task behavior

D. Attention Related Symptoms

1. Short attention span/Inattentive
2. Distractibility
3. Impulsive
4. Concentration/Daydreaming
5. Perseveration
6. Out of seat

E. Coordination/Neurological and Perceptual motor/sensori-motor Symptoms

1. General coordination deficits
2. Awkward/Clumsy
3. Fine motor control problems
4. Gross motor control problems
5. Dysiado/Dyskinesia/Involuntary motor movements
6. Poor finger coordination
7. Abnormal postural reflex/Gait disturbances
8. Equiv. neurol. signs/Dysfunction/Seizures/Soft signs
9. Transient strabismus
10. Mixed, confused laterality
11. Minimal cerebral dysfunction
12. Developmental soft signs
13. Visual/Perceptual motor problems
14. Auditory perceptual problems
15. Dyslexia/Letter or word reversals
16. Tactile deficits/Finger agnosia
17. Visual perceptual problems

F. Activity Disorders

1. Hyperactivity
2. Hyperkinesis
3. Constant motion/Restless/Fidgety
4. Over active
5. Under active/Slow moving/Easily tired

G. Language

1. Speech defect/Delay
2. Receptive language problems (vocabulary)

H. Physical Development

1. Developmental delay/Physically immature
2. Developmental soft signs

I. Performance

1. Erratic performance
2. Slow to complete work
3. Motivation problems
4. Organizational problems
5. Poor task completion (can do but won't do)
6. Excessive school absences/Tardy

J. Miscellaneous - Examples include:

1. Foreign language spoken in home
2. Hygiene
3. Parent referral
4. Birth order
5. Older child

II. ATTRIBUTIONS FOR BEHAVIOR

A. Home Causes

1. Home environment
2. Lacks family stability (e.g., many moves, divorce, alcoholism)
3. Lack of educational stimuliation/Interest
4. Parental management (discipline, supervision)
5. Poor nutrition, diet
6. Parental expectations
7. Sibling rivalry, extreme jealousy

B. Student Causes

1. Birth defects/Medically-related
2. Ability/Low academic potential
3. Psychological process deficits
4. Learning problems/Low academic performance
5. Developmental delays
6. Behavior difficulties/Self concept
7. Emotional-based symptoms

C. Teacher Causes

1. Poor teaching ability
2. Lacks knowledge/Understanding of student's needs
3. Personality/Interactional difficulties with student
4. Management/Organizational skills

D. School System Causes

1. Failure to identify special students
2. Availability of needed resources
3. Approximate classroom placement

E. Label Causes

1. Special Education category indicated (e.g., M.R., L.D.)
2. Dyslexia included; medical based causes, (e.g., hydrocephalus) excluded

III. PRE-REFERRAL CLASSROOM INTERVENTIONS

A. Methods: Techniques or method to teach academic lesson or modify observed behavior

1. Individual attention from classroom teacher
2. Special small group lessons
3. Curriculum adjustment (e.g., reduce or change assignments; change materials, oral tests)
4. Provide verbal and visual reminders
5. Simplify or repeat directions
6. Teacher-student conference
7. Provide organizational or memory aids (e.g., assignment pad, crib sheet)
8. Visual-auditory - tactile cues
9. Practice on weak academic skill (e.g., practice lettering, math facts)
10. Modify behavior (e.g., all techniques general; praise, involve in class work, improve self-concept)

B. Materials: Brand name unnecessary, but specificity of material essential

1. Tapes
2. A-V equipment
3. Manipulatives
4. Flashcards
5. Computer
6. Math quizzer
7. Academic games

C. Behavioral

1. Behavior modification program/Point system
2. Behavioral contract
3. Positive rewards, incentives
4. Checklists, goal setting
5. Lose privileges, stay after school
6. Isolation/Time-out
7. Ignore
8. Natural consequences

D. Structural change

1. Seat change/Study carrel
2. Retention/Change group placement
3. Instruction provided in different classroom (regular)
4. Work with classroom aide
5. Volunteer assistance (e.g., mother, college student)
6. Peer tutor

E. Specialized Help

1. Title I assistance
2. Work with remedial reading teacher
3. Language therapy
4. Resource room (e.g., special education)
5. Counseling (individual or group)

F. Informational

1. Referral to child study team
2. Diagnostic evaluation
3. Conduct informal assessment/Observation
4. Parent conferences
5. Consult with specialists, classroom teachers

G. Miscellaneous - Examples include:

1. "did everything possible"
2. "all things I do for all my students"

IV. DESIRED OUTCOMES FOR REFERRAL AND ASSESSMENT

A. Placement

1. Specialized environment to meet student's needs
2. Place in a specific program (e.g., LD, STEP)
3. Help from a specific teacher (e.g., behavior disorders teacher)

B. Assessment

1. Diagnostic testing
2. Establish strengths, weaknesses
3. Identify cause of problem
4. Establish ability level

C. Decision Making

1. Questions need for special services
2. Wants verification for special services
3. Questions whether student is learning disabled

4. Questions current classroom placement
5. Staffing to discuss program alternatives

D. Educational Suggestions

1. Instructional strategies for class teacher
2. Consultation for class teacher about student
3. Program development for mainstream teacher

E. Student Behavior Change

1. Improve in academic area (e.g., decoding of words)
2. Improve in behavioral area (e.g., accept correction, increase responsibility)

F. Help-in-school

1. Individualized teaching
2. Help in academic areas (e.g., help in reading)
3. Help in social-emotional area (e.g., counseling)
4. Improve student's skills

G. Help-out-of-school

1. Family counseling
2. Parent education/Support groups
3. Suggestions for parents

V. DESIRED CHANGE FOR STUDENT BEHAVIOR

A. Academic

1. Improve academics/Acquire skills/Function at grade level
2. Increase ability/Work up to own potential
3. Improve learning rate/Overcome learning problems
4. Comprehend instructional material
5. Follow and understand directions
6. Apply skills taught

B. Task Readiness

1. Increase school interest/motivation
2. Complete work/Stay on task
3. Work in a group situation
4. Demonstrate independence, responsibility in learning
5. Improved listening skills and attention
6. Improved study habits/Increased organization
7. Retain information
8. Follow directions
9. Willingness to try assignments
10. Ask questions

C. Behavior

1. Demonstrate self-control
2. Demonstrate appropriate classroom behavior/Behave
3. Increase ability to accept correction
4. Improve self-concept
5. Handle frustration/Eliminate temper tantrums
6. Improve peer interaction
7. Eliminate disruptive behavior

D. Extra Service

1. Individualized teaching
2. Special education assistance
3. Retention
4. Special tutoring (school and home)
5. Change of class

PUBLICATIONS

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University of Minnesota

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Ysseldyke, J. E. Assessing the learning disabled youngster: The state of the art (Research Report No. 1). November, 1977.

Ysseldyke, J. E., & Regan, R. R. Nondiscriminatory assessment and decision making (Monograph No. 7). February, 1979.

Foster, G., Algozzine, B., & Ysseldyke, J. Susceptibility to stereotypic bias (Research Report No. 3). March, 1979.

Algozzine, B. An analysis of the disturbingness and acceptability of behaviors as a function of diagnostic label (Research Report No. 4). March, 1979.

Algozzine, B., & McGraw, K. Diagnostic testing in mathematics: An extension of the PIAT? (Research Report No. 5). March, 1979.

Deno, S. L. A direct observation approach to measuring classroom behavior: Procedures and application (Research Report No. 6). April, 1979.

Ysseldyke, J. E., & Mirkin, P. K. Proceedings of the Minnesota roundtable conference on assessment of learning disabled children (Monograph No. 8). April, 1979.

Somwaru, J. P. A new approach to the assessment of learning disabilities (Monograph No. 9). April, 1979.

Algozzine, B., Forgnone, C., Mercer, C. D., & Trifiletti, J. J. Toward defining discrepancies for specific learning disabilities: An analysis and alternatives (Research Report No. 7). June, 1979.

Algozzine, B. The disturbing child: A validation report (Research Report No. 8). June, 1979.

Note: Monographs No. 1 - 6 and Research Report No. 2 are not available for distribution. These documents were part of the Institute's 1979-1980 continuation proposal, and/or are out of print.

Ysseldyke, J. E., Algozzine, B., Regan, R., & Potter, M. *Technical adequacy of tests used by professionals in simulated decision making* (Research Report No. 9). July, 1979.

Jenkins, J. R., Deno, S. L., & Mirkin, P. K. *Measuring pupil progress toward the least restrictive environment* (Monograph No. 10). August, 1979.

Mirkin, P. K., & Deno, S. L. *Formative evaluation in the classroom: An approach to improving instruction* (Research Report No. 10). August, 1979.

Thurlow, M. L., & Ysseldyke, J. E. *Current assessment and decision-making practices in model programs for the learning disabled* (Research Report No. 11). August, 1979.

Deno, S. L., Chiang, B., Tindal, G., & Blackburn, M. *Experimental analysis of program components: An approach to research in CSDC's* (Research Report No. 12). August, 1979.

Ysseldyke, J. E., Algozzine, B., Shinn, M., & McGue, M. *Similarities and differences between underachievers and students labeled learning disabled: Identical twins with different mothers* (Research Report No. 13). September, 1979.

Ysseldyke, J., & Algozzine, R. *Perspectives on assessment of learning disabled students* (Monograph No. 11). October, 1979.

Poland, S. F., Ysseldyke, J. E., Thurlow, M. L., & Mirkin, P. K. *Current assessment and decision-making practices in school settings as reported by directors of special education* (Research Report No. 14). November, 1979.

McGue, M., Shinn, M., & Ysseldyke, J. *Validity of the Woodcock-Johnson psycho-educational battery with learning disabled students* (Research Report No. 15). November, 1979.

Deno, S., Mirkin, P., & Shinn, M. *Behavioral perspectives on the assessment of learning disabled children* (Monograph No. 12). November, 1979.

Sutherland, J. H., Algozzine, B., Ysseldyke, J. E., & Young, S. *What can I say after I say LD?* (Research Report No. 16). December, 1979.

Deno, S. L., & Mirkin, P. K. *Data-based IEP development: An approach to substantive compliance* (Monograph No. 13). December, 1979.

Ysseldyke, J., Algozzine, B., Regan, R., & McGue, M. *The influence of test scores and naturally-occurring pupil characteristics on psychoeducational decision making with children* (Research Report No. 17). December, 1979.

Algozzine, B., & Ysseldyke, J. E. *Decision makers' prediction of students' academic difficulties as a function of referral information* (Research Report No. 18). December, 1979.

Ysseldyke, J. E., & Algozzine, B. *Diagnostic classification decisions as a function of referral information* (Research Report No. 19). January, 1980.

Deno, S. L., Mirkin, P. K., Chiang, B., & Lowry, L. *Relationships among simple measures of reading and performance on standardized achievement tests* (Research Report No. 20). January, 1980.

Deno, S. L., Mirkin, P. K., Lowry, L., & Kuehnle, K. *Relationships among simple measures of spelling and performance on standardized achievement tests* (Research Report No. 21). January, 1980.

Deno, S. L., Mirkin, P. K., & Marston, D. *Relationships among simple measures of written expression and performance on standardized achievement tests* (Research Report No. 22). January, 1980.

Mirkin, P. K., Deno, S. L., Tindal, G., & Kuehnle, K. *Formative evaluation: Continued development of data utilization systems* (Research Report No. 23). January, 1980.

Deno, S. L., Mirkin, P. K., Robinson, S., & Evans, P. *Relationships among classroom observations of social adjustment and sociometric rating scales* (Research Report No. 24). January, 1980.

Thurlow, M. L., & Ysseldyke, J. E. *Factors influential on the psychoeducational decisions reached by teams of educators* (Research Report No. 25). February, 1980.

Ysseldyke, J. E., & Algozzine, B. *Diagnostic decision making in individuals susceptible to biasing information presented in the referral case folder* (Research Report No. 26). March, 1980.

Thurlow, M. L., & Greener, J. W. *Preliminary evidence on information considered useful in instructional planning* (Research Report No. 27). March, 1980.

Ysseldyke, J. E., Regan, R. R., & Schwartz, S. Z. *The use of technically adequate tests in psychoeducational decision making* (Research Report No. 28). April, 1980.

Richey, L., Potter, M., & Ysseldyke, J. *Teachers' expectations for the siblings of learning disabled and non-learning disabled students: A pilot study* (Research Report No. 29). May, 1980.

Thurlow, M. L., & Ysseldyke, J. E. *Instructional planning: Information collected by school psychologists vs. information considered useful by teachers* (Research Report No. 30). June, 1980.

Algozzine, B., Webber, J., Campbell, M., Moore, S., & Gilliam, J. *Classroom decision making as a function of diagnostic labels and perceived competence* (Research Report No. 31). June, 1980.

Ysseldyke, J. E., Algozzine, B., Regan, R. R., Potter, M., Richey, L., & Thurlow, M. L. Psychoeducational assessment and decision making: A computer-simulated investigation (Research Report No. 32). July, 1980.

Ysseldyke, J. E., Algozzine, B., Regan, R. R., Potter, M., & Richey, L. Psychoeducational assessment and decision making: Individual case studies (Research Report No. 33). July, 1980.

Ysseldyke, J. E., Algozzine, B., Regan, R., Potter, M., & Richey, L. Technical supplement for computer-simulated investigations of the psychoeducational assessment and decision-making process (Research Report No. 34). July, 1980.

Algozzine, B., Stevens, L., Costello, C., Beattie, J., & Schmid, R. Classroom perspectives of LD and other special education teachers (Research Report No. 35). July, 1980.

Algozzine, B., Siders, J., Siders, J., & Beattie, J. Using assessment information to plan reading instructional programs: Error analysis and word attack skills (Monograph No. 14). July, 1980.

Ysseldyke, J., Shinn, M., & Epps, S. A comparison of the WISC-R and the Woodcock-Johnson Tests of Cognitive Ability (Research Report No. 36). July, 1980.

Algozzine, B., & Ysseldyke, J. E. An analysis of difference score reliabilities on three measures with a sample of low achieving youngsters (Research Report No. 37). August, 1980.

Shinn, M., Algozzine, B., Marston, D., & Ysseldyke, J. A theoretical analysis of the performance of learning disabled students on the Woodcock-Johnson Psycho-Educational Battery (Research Report No. 38). August, 1980.

Richey, L. S., Ysseldyke, J., Potter, M., Regan, R. R., & Greener, J. Teachers' attitudes and expectations for siblings of learning disabled children (Research Report No. 39). August, 1980.

Ysseldyke, J. E., Algozzine, B., & Thurlow, M. L. (Eds.). A naturalistic investigation of special education team meetings (Research Report No. 40). August, 1980.

Meyers, B., Meyers, J., & Deno, S. Formative evaluation and teacher decision making: A follow-up investigation (Research Report No. 41). September, 1980.

Fuchs, D., Garwick, D. R., Featherstone, N., & Fuchs, L. S. On the determinants and prediction of handicapped children's differential test performance with familiar and unfamiliar examiners (Research Report No. 42). September, 1980.

Algozzine, B., & Stoller, L. Effects of labels and competence on teachers' attributions for a student (Research Report No. 43). September, 1980.

Ysseldyke, J. E., & Thurlow, M. L. (Eds.). The special education assessment and decision-making process: Seven case studies (Research Report No. 44). September, 1980.

Ysseldyke, J. E., Algozzine, B., Potter, M., & Regan, R. A descriptive study of students enrolled in a program for the severely learning disabled (Research Report No. 45). September, 1980.

Marston, D. Analysis of subtest scatter on the tests of cognitive ability from the Woodcock-Johnson Psycho-Educational Battery (Research Report No. 46). October, 1980.

Algozzine, B., Ysseldyke, J. E., & Shinn, M. Identifying children with learning disabilities: When is a discrepancy severe? (Research Report No. 47). November, 1980.

Fuchs, L., Tindal, J., & Deno, S. Effects of varying item domain and sample duration on technical characteristics of daily measures in reading (Research Report No. 48). January, 1981.

Marston, D., Lowry, L., Deno, S., & Mirkin, P. An analysis of learning trends in simple measures of reading, spelling, and written expression: A longitudinal study (Research Report No. 49). January, 1981.

Marston, D., & Deno, S. The reliability of simple, direct measures of written expression (Research Report No. 50). January, 1981.

Epps, S., McGue, M., & Ysseldyke, J. E. Inter-judge agreement in classifying students as learning disabled (Research Report No. 51). February, 1981.

Epps, S., Ysseldyke, J. E., & McGue, M. Differentiating LD and non-LD students: "I know one when I see one" (Research Report No. 52). March, 1981.

Evans, P. R., & Peham, M. A. S. Testing and measurement in occupational therapy. A review of current practice with special emphasis on the Southern California Sensory Integration Tests (Monograph No. 15). April, 1981.

Fuchs, L., Wesson, C., Tindal, G., & Mirkin, P. Teacher efficiency in continuous evaluation of IEP goals (Research Report No. 53). June, 1981.

Fuchs, D., Featherstone, N., Garwick, D. R., & Fuchs, L. S. The importance of situational factors and task demands to handicapped children's test performance (Research Report No. 54). June, 1981.

Tindal, G., & Deno, S. L. *Daily measurement of reading: Effects of varying the size of the item pool* (Research Report No. 55). July, 1981.

Fuchs, L. S., & Deno, S. L. *A comparison of teacher judgment, standardized tests, and curriculum-based approaches to reading placement* (Research Report No. 56). August, 1981.

Fuchs, L., & Deno, S. *The relationship between curriculum-based mastery measures and standardized achievement tests in reading* (Research Report No. 57). August, 1981.

Christenson, S., Graden, J., Potter, M., & Ysseldyke, J. *Current research on psychoeducational assessment and decision making: Implications for training and practice* (Monograph No. 16). September, 1981.

Christenson, S., Ysseldyke, J., & Algozzine, B. *Institutional constraints and external pressures influencing referral decisions* (Research Report No. 58). October, 1981.

Fuchs, L., Fuchs, D., & Deno, S. *Reliability and validity of curriculum-based informal reading inventories* (Research Report No. 59). October, 1981.

Algozzine, B., Christenson, S., & Ysseldyke, J. *Probabilities associated with the referral-to-placement process* (Research Report No. 60). November, 1981.

Tindal, G., Fuchs, L. Christenson, S., Mirkin, P., & Deno, S. *The relationship between student achievement and teacher assessment of short- or long-term goals* (Research Report No. 61). November, 1981.

Mirkin, P., Fuchs, L., Tindal, G., Christenson, S., & Deno, S. *The effect of IEP monitoring strategies on teacher behavior* (Research Report No. 62). December, 1981.

Wesson, C., Mirkin, P., & Deno, S. *Teachers' use of self instructional materials for learning procedures for developing and monitoring progress on IEP goals* (Research Report No. 63). January, 1982.

Fuchs, L., Wesson, C., Tindal, G., Mirkin, P., & Deno, S. *Instructional changes, student performance, and teacher preferences: The effects of specific measurement and evaluation procedures* (Research Report No. 64). January, 1982.

Potter, M., & Mirkin, P. *Instructional planning and implementation practices of elementary and secondary resource room teachers: Is there a difference?* (Research Report No. 65). January, 1982.

Thurlow, M. L., & Ysseldyke, J. E. Teachers' beliefs about LD students (Research Report No. 66). January, 1982.

Graden, J., Thurlow, M. L., & Ysseldyke, J. E. Academic engaged time and its relationship to learning: A review of the literature (Monograph No. 17). January, 1982.

King, R., Wesson, C., & Deno, S. Direct and frequent measurement of student performance: Does it take too much time? (Research Report No. 67). February, 1982.

Greener, J. W., & Thurlow, M. L. Teacher opinions about professional education training programs (Research Report No. 68). March, 1982.

Algozzine, B., & Ysseldyke, J. Learning disabilities as a subset of school failure: The oversophistication of a concept (Research Report No. 69). March, 1982.

Fuchs, D., Zern, D. S., & Fuchs, L. S. A microanalysis of participant behavior in familiar and unfamiliar test conditions (Research Report No. 70). March, 1982.

Shinn, M. R., Ysseldyke, J., Deno, S., & Tindal, G. A comparison of psychometric and functional differences between students labeled learning disabled and low achieving (Research Report No. 71). March, 1982.

Thurlow, M. L. Graden, J., Greener, J. W., & Ysseldyke, J. E. Academic responding time for LD and non-LD students (Research Report No. 72). April, 1982.

Graden, J., Thurlow, M., & Ysseldyke, J. Instructional ecology and academic responding time for students at three levels of teacher-perceived behavioral competence (Research Report No. 73). April, 1982.

Algozzine, B., Ysseldyke, J., & Christenson, S. The influence of teachers' tolerances for specific kinds of behaviors on their ratings of a third grade student (Research Report No. 74). April, 1982.

Wesson, C., Deno, S., & Mirkin, P. Research on developing and monitoring progress on IEP goals: Current findings and implications for practice (Monograph No. 18). April, 1982.

Mirkin, P., Marston, D., & Deno, S. L. Direct and repeated measurement of academic skills: An alternative to traditional screening, referral, and identification of learning disabled students (Research Report No. 75). May, 1982.

Algozzine, B., Ysseldyke, J., Christenson, S., & Thurlow, M. Teachers' intervention choices for children exhibiting different behaviors in school (Research Report No. 76). June, 1982.

Tucker, J., Stevens, L. J., & Ysseldyke, J. E. Learning disabilities: The experts speak out (Research Report No. 77). June, 1982.

Thurlow, M. L., Ysseldyke, J. E., Graden, J., Greener, J. W., & Mecklenberg, C. Academic responding time for LD students receiving different levels of special education services (Research Report No. 78). June, 1982.

Graden, J. L., Thurlow, M. L., Ysseldyke, J. E., & Algozzine, B. Instructional ecology and academic responding time for students in different reading groups (Research Report No. 79). July, 1982.

Mirkin, P. K., & Potter, M. L. A survey of program planning and implementation practices of LD teachers (Research Report No. 80). July, 1982.

Fuchs, L. S., Fuchs, D., & Warren, L. M. Special education practice in evaluating student progress toward goals (Research Report No. 81). July, 1982.

Kuehnle, K., Deno, S. L., & Mirkin, P. K. Behavioral measurement of social adjustment: What behaviors? What setting? (Research Report No. 82). July, 1982.

Fuchs, D., Dailey, Ann Madsen, & Fuchs, L. S. Examiner familiarity and the relation between qualitative and quantitative indices of expressive language (Research Report No. 83). July, 1982.

Videen, J., Deno, S., & Marston, D. Correct word sequences: A valid indicator of proficiency in written expression (Research Report No. 84). July, 1982.

Potter, M. L. Application of a decision theory model to eligibility and classification decisions in special education (Research Report No. 85). July, 1982.

Greener, J. E., Thurlow, M. L., Graden, J. L., & Ysseldyke, J. E. The educational environment and students' responding times as a function of students' teacher-perceived academic competence (Research Report No. 86). August, 1982.

Deno, S., Marston, D., Mirkin, P., Lowry, L., Sindelar, P., & Jenkins, J. The use of standard tasks to measure achievement in reading, spelling, and written expression: A normative and developmental study (Research Report No. 87). August, 1982.

Skiba, R., Wesson, C., & Deno, S. L. The effects of training teachers in the use of formative evaluation in reading: An experimental-control comparison (Research Report No. 88). September, 1982.

Marston, D., Tindal, G., & Deno, S. L. Eligibility for learning disability services: A direct and repeated measurement approach (Research Report No. 89). September, 1982.

Thurlow, M. L., Ysseldyke, J. E., & Graden, J. L. LD students' active academic responding in regular and resource classrooms (Research Report No. 90). September, 1982.

Ysseldyke, J. E., Christenson, S., Pianta, R., Thurlow, M. L., & Algozzine, B. An analysis of current practice in referring students for psychoeducational evaluation: Implications for change (Research Report No. 91). October, 1982.